WILD LIFE IN MUGHAL INDIA : FROM TEXTS AND PAINTINGS

ABSTRACT

THESIS

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ABSTRACT

This thesis aims at describing the various aspects of the wild life in Mughal India from texts and paintings. There is no doubt that when we study the Mughal sources, we often come to know that the wild life in Mughal India had been very interesting phenomenon. The Mughal Emperors had special interest in the wild life or flora and fauna of this country. In spite of much works of governance, the Emperors like Babur, Humayun, Akbar, Jahangir and Shah Jahan and even Aurangzeb devoted their time for the wildlife in some way or the other. There were a number of reasons which encouraged the Mughal Emperors to be interested in the flora and fauna of the India. They were interested in hunting, domestication of the animals, birds and animals-fights, breeding and rearing of them and side by side were great lovers of plants, trees and flowers, etc. All these things derived them close to the flora and fauna of Hindustan.

Present thesis scrutinizes the aspects like the Mughal emperors' love and scientific curiosity towards the flora and fauna of India, their hunting spirit, their contribution to highlight the phenomenon of wild life through their visual representation in the art and architecture, etc. Furthermore, the thesis deals with various kinds of animals, birds, their life in captivity, the royal management, treatment given to them and breeding also. On the other hand it throws light on a variety of plants, trees, fruits, flowers, herbs and medicinal plants of that period.

While much work has been done on the social, political and economic aspects of Mughal India, the wild life appears to be neglected or little touched aspect, this is the basic reason for the choice of this theme. Though there are some pioneer works on wild animals and birds done by Salim Ali, S.K. Saraswati, M.A.Alvi, Divyabhanusinh Chavda no comprehensive work on the wild life of Mughal India has yet been undertaken.

The information or the source material which enabled me to complete this work is much in Persian and English translated sources like *Baburnama, Humayunama, Akbarnama, Tuzuk-i-Jahangiri.* Besides these, a number of traveller's accounts like Bernier, Pietra Della Velle, Jhon Fryer, Linschoten and Thevenot provide considerable information on this subject. Much information lies in the illustrations of the *Baburnama, Akbarnama, Tuzuk-i-Jahangiri, Anwar-i-Suhaili, Ajaib-al-Makhluqat, etc.* There is information in the surface embellishment of the Mughal buildings also which gives a clear picture of the flora and fauna of that period. Therefore, I have attempted to study all these textual as well as visual evidences to complete my work.

The thesis comprises eight chapters. Each chapter deals with a particular aspect of wild life of the Mughal period. These chapters are as follows:-

- (i) Mughal emperors as Naturalists : Akbar and Jahangir
- (ii) Wildlife in Mughal Paintings
  - (a) Illustrated Manuscripts: *Baburnama, Akbarnama, Anwar-i-Suhaili,* and *Ajaib-al-Makhluqat*
  - (b) Album Pictures
  - (c) Margin Paintings
- (iii) Hunting and other Sports
- (iv) Flora and Fauna in Mughal Architecture
- (v) Gardens in Mughal India
- (vi) Herbs and Medicinal Plants
- (vii) Animals in captivity : Management, Treatment and Breeding
- (viii) Relevance of Mughal Miniatures in describing Wild life

The first chapter aims at covering the aspect including the natural phenomena and flora fauna of India which has been described by Babur in his Memoirs *Baburnama* and by Jahangir in *Tuzuk-i-Jahangiri*. Babur and Jahangir both were great naturalists of their times, and they were very keen observer of the flora and fauna. At the time of his campaign, Babur had to pass through a number of places, including jungles, plains, mountains or hilly regions, rivers,

towns, villages, habited and non-habited landscapes, etc. which he describes in his Memoirs. He writes in detail with enthusiasm about a number of animals, birds, trees and plants of India. He describes elephants and gives detail about different species of monkeys; affinity between the rhinoserous and the horse; and between squirrel and the mouse. He also writes about crocodiles, tigers, water hogs, frogs, fishes, wild buffaloes, blue bulls (*nilgais*), deers, gini cows and also about a number of birds like peacock, pigeon, parrot, ducks and so on. Babur describes a number of plants, trees, fruits and flowers like mango trees, *jamun*, jack fruit, jasun flower, white jasmine and large number of varieties of flora and fauna. Similarly, Jahangir mentions about a number of plants, fruits, flowers, animals and birds in his Memoirs. He also notices animals like *cheetah,* tiger, lion, deer, wild buffalo, and elephants. He personally took interest in hunting, domestication, management, treatment, breeding and rearing of the animals. His description of plants, trees and flowers is scientific and very detailed. The descriptions related to them in the *Baburnama and Tuzuk-i-Jahangiri* prove that both the emperors Babur and Jahangir were great naturalists of their time.

The second chapter highlights the wildlife in the Mughal paintings, i.e., the illustrated manuscripts of the *Baburnama, Akbarnama, Tuzuk-i-Jahangiri, Anwar-i-Suhaili* and *Ajaib-ul-Makhluqat,* etc. In this chapter I have made an attempt to describe different aspects related to the depiction of animals, birds, plants, flowers, etc. The Mughal emperors had special interest in the art of painting. Therefore, a large number of paintings on the theme of natural history were made by excellent painters. After the death of Babur in 1530 A.D., his son Humayun became the emperor but the rise of Sher Shah forced Humayun to leave India and stayed at the court of Shah Abbas of Persia. After the weakening of Sur regime Humayun got an opportunity to capture the throne of Delhi. From Persia he brought with him some excellent painters, namely Khwaja Abdus Samad and Mir Sayyed Ali. During the reign of Akbar the painters like Basawan, Manohar, Bishandas, Daulat, Govardhan, Lal and Miskin executed a large number of paintings including hunting scenes, animal

fights and different species of the birds, plants, trees, fruits and the beautiful flowers, etc. Similarly, Jahangir paid a considerable attention towards the development of art of Manuscript painting and album pictures. He established a royal atelier in which painters like Mansur, Bichitra, Abul Hasan, Murad and Pidarath made excellent paintings including pictures on a great variety of the flora and fauna.

The third chapter is related with hunting and other sports. It is a well known fact that the Mughal emperors right from Babur were very fond of hunting wild animals and birds. The hunting (*shikar*) had been a pastime for his ancestors like Chingez Khan and Timur. So, the Mughals also continued it for their enjoyment. The emperors normally went on hunting when they were on expeditions. Besides, they also preferred hunting in day to day life. The hunting operations were well organised, well planned and high security was maintained.

Besides, common hunting operations, the Mughals created a number of hunting grounds (*qamargahs* or *shikargahs*) situated at different places, i.e., Bari, Hisar, Sunnam, Bhatinda, Bhatnir, Nagaur, Narwar, Palam, Shekhupura near Lahore and Jalalabad, etc. Abul Fazl mentioned in the *Ain-i-Akbari* about the methods, tactics, kinds of hunting, and fields of hunting. The Mughals used different hunting equipments like drums, *naqqaras*, ropes, chains, and nets, etc. Quite often they used weapons like swords, spears, guns, matchlocks bows & arrows for hunting. Even trained *cheetahs* and dogs were also used at the time of hunting the wild animals particularly deer. Apart from the emperor's nobles and soldiers also participated in hunting campaigns. We have information that Nur Jahan participated in hunting campaigns. In brief, during Mughal India hunting was also popular among the common people in their everyday life.

The fourth chapter gives a clear glimpse of the flora and fauna depicted in the art and architecture of the Mughals. The Mughal emperors being great lovers of flora and fauna tried to use it in the decoration and surface embellishment of their palaces, forts and royal buildings, etc. Some of these

buildings like *Agra Fort*, *kutub khana* (Fatehpur Sikri), *Buland Darwaza*, Humayun's tomb, Akbar's tomb, Jahangir's tomb, Shan Jahan' s Fort at Delhi, and the Taj Mahal at Agra are the finest example of architecture in which depiction of flora and fauna testify deep affection of the Mughals for the natural surroundings comprising plants, and flowers, etc.

The fifth chapter of thesis describes the ornamental gardens (*chahar-bagh)* of the Mughals which integrates importantly the flora and fauna. The founder of the Mughal dynasty Babur was very much inspired from the composition and layout of the gardens of Central Asia and Persia. Another important reason was his deep affection for the flora and fauna. On the other hand the climatic condition of India also played a major role to bring this idea of creating formal gardens in the mind of Babur. So, Babur created gardens like Aram *bagh*, *Bagh-i-Wafa* (Garden of Fidelity), *Bagh-i-chenar* .Similarly, Jahangir also created beautiful gardens like Shalimar *bagh*, Nishat *bagh* etc. A large number of trees: mango, *jamun, ashok*, banyan and *bel* and many other fruit trees and flower plants were planted in these gardens. These gardens also provided shelter to the animals like monkeys, rabbits, cats, deer and birds like peacock, sparrow, crows, pigeons, cuckoo and parrots etc.

The sixth chapter deals with the herbs and medicinal plants which were commonly used to cure the various diseases during the Mughal period. While the Ayurveda has been old and very important medical science in India, during medieval period the another branch of the medical science namely Unani medicine had become very important. During the Mughal period we find references of the use of many plants, fruits, and seeds like Indian fig, pepper, ginger, clove, cardamom, camphor, etc. in the form of medicine. We have references also about the establishment of hospitals.

In the seventh chapter, I have made an attempt to explain in detail about the animals in captivity, their management, treatment and breeding. Abul Fazl writes that Akbar kept a large number of animals and birds for various purposes like trained *cheetahs*, dogs, deer, elephants, horses, camels, mules,

buffaloes and cows, etc. Similarly, birds like *saras*, falcon (*baz*), parrots, ducks and swans were also kept. Both Akbar and Jahangir tried to keep these animals and birds under an organised management system. Every animal was categorised and food was provided according to their size and capacity. A large number of servants and keepers were appointed to look after them. Even treatment or medical facilities were also given to these animals and birds. The main purpose to keep these animals and birds was the breeding, and their engagement in entertainment and transportation. There are detailed descriptions of elephants, horses, deers and other animals and birds in the *Ain-i-Akbari* and the *Tuzuk-i-Jahangiri*. The animal-fights and betting was also common feature during Mughal period. Therefore, the Mughal emperors tried to experiment through breeding to produce new races and to thus safeguard a number of species of animals and birds.

The eighth chapter is purely based on the Mughal miniatures which contain a lot of information on the wild life of the Mughal period. It is true that with the inception of the Mughal rule in India, painting received a mighty impetus. Thus, the greatest contribution to the Mughal painting in Indian art is the portrait accompanied with the subject of realistic representation of the birds, animals and trees, plants and flowers, manifesting both the Indian and Persian techniques. During Jahangir's time a large number of pictures of birds and animals were drawn by Mansur, Manohar and Abul Hasan. Their work, by and large, reflect the wild life of the Mughal period. The unique feature of these paintings is the naturalistic depiction of the animals and birds in their real form and actual habitat. Additionally, the border designs and the pages of calligraphy are fully decorated with a number of drawings of birds, animals and tiny plants with blossom.

Thus, Mughal India had been very favourable for the maintenance and safe keeping of the wild life, or the flora and fauna. The emperors like Babur, Humayun Akbar, Jahangir, Shah Jahan and even Aurangzeb contributed much to the understanding of an importance of the flora and fauna of India.

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Certified that **Ms. Amita Singh** worked under my supervision on the topic "***Wild Life in Mughal India:From Texts and Paintings***". This thesis is the original work of the candidate and I find it suitable for submission for the award of the Degree of Doctor of Philosophy.

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CONTENT

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Amita.
(Amita Singh)

LIST OF ABBREVIATIONS

AIN	:	*Ain-i-Akbari*
AJAIB	:	*Ajaib-al-Makhluqat*
ANWAR	:	*Anwar-i-Suhaili*
BKB	:	*Bharat Kala Bhawan*
BM	:	*British Museum*
BN	:	*Baburnama*
BNHS	:	*The Journal of Bombay Natural History Society*
CBL	:	*Chester Betty Library*
FAG	:	*Freer Gallery of Art*
FAM	:	*Fog Art Museum*
IGNA	:	*Indira Gandhi National Art Academy*
IM	:	*Indian Museum*
LALIT	:	*Lalit Kala, Journal of the Lalit Kala Academy*
MARG	:	*Marg Publication*
MMA	:	*Metropolitan Museum of Art*
NM	:	*National Museum*
RR	:	*Raza Library*
RUPAM	:	*Rupam, Quarterly Journal of the Oriental Art*
TUZUK	:	*Tuzuk-i-Jahangiri*
VAM	:	*Victoria and Albert Museum*

LIST OF ILLUSTRATIONS

Introduction

INTRODUCTION

Wild life has been a very interesting phenomenon of the human civilization. The history of the bond between man and the animal goes back to the days when he (man) was a wandering hunter and food gatherer. Thus, the animals and birds had never been far from the habitat of the human being. From earliest times till present day man has always been fascinated by the growth and survival of the flora and fauna in the lap of this wonderful and amazing mother earth. Man is always occupied with the animals and birds and employs them for various purposes. Consequently, it may be fairly said that the history of wild life is as ancient as the history of the mankind.

While working on wild life, we come across that much has been written about the kings, princess, wars, victories and defeats and about the rise and fall of the empires. The royals and their occupations and engagements are under focus of the scholars. But a considerable attention has not been paid to the study of animals and birds which seems really an injustice with the nature history, i.e., the wild life. Even though the animals always figure in our everyday life and they remain scared and the faithful slaves of men. Nevertheless, some pioneer works related to the study of wild life by Salim Ali, Divyabhanusinh Chavda, M. A. Alvi and S. K. Saraswati, have already appeared but these are short and do not envelop the whole canvas of the wild life. Hence, the select theme "Wild Life in Mughal India: from texts and paintings" of the present study forms the subject of this thesis – a humble step indeed to fulfil this lacuna.

This thesis deals with various aspects of wild life (flora and fauna) of the sixteenth and seventeenth centuries Mughal India viz. Mughal emperor's love for nature; passion for hunt; devices and methods of hunting, domestication of animals and birds, rare and curious species of animals and birds, their habitats and characteristic features. Further, it deals with the management, treatment and breeding of the animals and birds in captivity under the Mughals who (Babur, and Jahangir) were naturalist. Additionally, the thesis presents glimpses of the flora like various plants (including medicinal plants as well), trees, flowers and fruits which are quite often shown in the miniatures depicting royal gardens, and more commonly represented in the surface embellishment of the interior and exterior parts of the Mughal buildings. Thus, present thesis aims at encompassing the wild life as a whole illustrating its association with man and nature. The Mughal period, of course, the richest in this context, is presently under study.

The source material which constitutes the fundamental source of this thesis is considerably the contemporary Persian chronicles, however edited and translated into English, e.g., *Baburnama, Humayunama, Ain-i-Akbari, Tuzuk-i-Jahangiri* and *Shahjahanama,* etc. The travellers accounts like those of Bernier, Pietre Della Velle, John Fryer, Linschoten and Thevenot, etc. further supplement the historical material on the subject. Similarly, the visual material on wild life depicted in contemporary illustrated MSS and albums, etc., particularly in the paintings of the *Baburnama, Akbarnama, Tuzuk-i-Jahangiri, Anwar-i-Suhaili,* and *Ajaib-al-Makhluqat,* etc. have been utilised. These contain a lot of information in illustrated form on the flora and fauna of Mughal India. The motifs and designs decorating the walls of the Mughal buildings

further enrich our study material. Apart from these sources, enormous number of books, or the secondary sources help to understand the intricacies of the research and its methodology, etc.

The thesis contains eight chapters dealing with different themes and aspects of the wild life in Mughal India in a comprehensible manner.

With the establishment of the Mughal Empire by Zahiruddin Mohammad Babur, many changes took place in the socio-cultural life of Hindustan. Even the wild life or flora and fauna could not escape from the eyes of the Mughal emperors. The reason behind this was one, and that was the keen interest of the Mughal emperors in wild life. Babur in his Memoir the *Baburnama,* has given a graphic description of a number of things of India. Babur being a great lover and admirer of the nature had a keen eye. It facilitated him to write about the natural beauty of India. His Memoirs in its section 'description of Hindustan' deals with the seasons, climates, environment, plants, trees, flowers, forests, variety of animals and birds, and a number of other things. Thus, Babur tried to keep the flora and fauna alive in the form of paintings and in the creation of the paradise-like gardens, i.e., Aram *Bagh*, *Bagh-i-wafa* (Garden of fidelity), *Bagh-i-chenar,* etc. These instances establish Babur as a great naturalist. The remains of his gardens are still extant.

Furthermore, the flora and fauna has remained a subject of importance and interest throughout the Mughal period. Though it suffered a disruption because of the rise of Sher Shah, and Humayun's exile and sojourn at the court of Shah Tehmasp of Persia. Nevertheless, it proved positive for the rise of Mughal school of painting and Humayun brought some excellent calligraphers and painters, viz. Abdus Samad , Mir Sayyed Ali with him. After Humayun, his

son the Akbar paid full attention towards the phenomenon of wild life in Hindustan. Abul Fazl highlights in *Ain-i-Akbari* about the keen interest of Akbar in the flora and fauna. Similarly, Akbar's son, Jahangir was also a great naturalist. He wrote in his Memoirs *Tuzuk-i-Jahangiri* about the natural beauty of this country. His Memoir is full of long description of curious and rare animals, birds, plants and flowers, etc. He maintained a rich menagerie and an aviary managed by expert officials and servants under his personal supervision. He also created beautiful gardens, i.e., Shalimar garden, Nishat garden, etc. Undoubtedly, the Mughal emperors, particularly Babur, Akbar and Jahangir, were great naturalists.

The Mughal emperors' love towards the flora and fauna inspired them to document the flora and fauna in visual form. Akbar and Jahangir played a very significant role in highlighting the wildlife in Manuscript illustrations, album pictures, and margin paintings. These paintings are unique source for reconstructing the history of wild life. The paintings contain the hunting scenes, trapping of birds, trapping of animals, and also drawing of different flowers, plants and birds and animal. During the Mughal period, the illustrations from the *Baburnama*, *Akbarnama*, *Tuzuk-i-Jahangiri, Anwar-i-Suhaili* and *Ajaib-ul-Makhluqat* contain representative examples of the birds and animals and pictures of species of flowers, plants and trees of India. The painters of Akbar's time mainly Daswant, Basawan, Miskin and Lal and of Jahangir's time, like Mansur, Abul Hasan, Manohar, Inayat, Govardhan and Bichitra have contributed much in this field.

Another important aspect of wild life during Mughal India was the hunt of the wild animals and birds. The hunting spirit of the Mughal emperors,

nobles, etc. was also another important reason for their encounter with the wild animals and birds of different species. With the arrival of Babur the hunting of the wild animals had become an interesting feature and the source of pleasure in India. After Babur his descendents-Humayun, Akbar, Jahangir, Shah Jahan and even Aurangzeb enjoyed hunting as a big game of that time.

There are graphic descriptions of royal hunt in the *Baburnama, Humayunnama, Akbarnama,* and *Tuzuk-i-Jahangiri.* Abul Fazl writes in the *Ain-i-Akbari* about the methods, tactics and modes of hunting. In this context, a number of hunting equipments like drums, *naqqaras*, chains, ropes, and nets etc., find a mention. Similarly, the Mughals used guns, matchlocks, swords, axes, spears, bows and arrows for hunting. The emperor Jahangir often writes about his hunting expeditions in his Memoirs *Tuzuk-i-Jahangiri.* The sources reveal that among the Mughal emperors, particularly Akbar and Jahangir, have a great fascination for the tiger and lion hunt. Apart from the tiger and lion, they used to hunt other animals also, viz. deer, blue bull, rhinoceros and also the trapping of elephants, etc. With the study of the Mughal sources we often come across that the nobles, soldiers and even royal ladies, like Nur Jahan also participated in hunting expeditions. It is more interesting that hunting was also popular among the common people in their everyday life. Thus, hunting was a remarkable event in Mughal period which derived the Mughal emperors very close to the wild life.

Similarly, the glimpses of the flora and fauna can also be seen in the Mughal architectue. It is not merely a project of bricks, stones and mortars, but attaches equal importance to topography, and surrounding environment comprising gardens, plants, and flowers, etc. Since ancient times the depiction

of flora and fauna has been a unique feature in Indian architecture. Before the Mughals, the depiction of animals, birds and flower plants can be seen in ancient Hindu temples and secular buildings where a clear depiction of *matsya* (fish), *kurma* (tortoise), *mriga* (dear), *simha* (lion), *asva* (horse) and flower like *champa, chameli, padma, kamal* (lotus) etc. is distinct. With the Mughal rule a new phase started in the development of architecture in India. The period of Akbar (r.1556-1605) and of Shah Jahan (r.1628-58) has been remarkable for the development of the architecture. The Mughals used several types of designs for architectural decoration such as arabesques, penals of calligraphy and floral motifs, each in a great variety. The dados of *kutub-khana* (so called Sultana's palace) at Fatehpur Sikri (1572-85) depicts *jungle* scenes and natural flora and fauna, carved in red sandstone. Similarly, floral depiction can be seen in the dados of the *Musamman Burj* and the *Diwan-i-Khas* at Agra Fort, and in several other Mughal buildings of that time. During the time of Shah Jahan (r.1628-58) the Mughal architecture reached its zenith, and the Taj Mahal is the best and a wonderful example of this development. The unique *parchinkari* (pietra-dura) and the flowers, plants, leaves, delicately carved in marble and red sandstone at the Taj complex give a glimpse of the natural beauty of plants with blossom.

The deep affection of the Mughals with flora and fauna can be seen in their creation of the ornamental gardens and flower beds in India. These formal gardens which were laid out by the Mughals at Agra, Delhi, Lahore and abundantly in Kashmir are beautiful examples of the affection of Mughal emperors for flora and fauna and nature as a whole. A number of variety of the trees were laid out, i.e., *aam* (mango), *amaltas* (laburnum), *amla* (

myrabalone), large tree like *ashok* (saraca indica) *Bargad* (ficus indica), *bel* (wood apple) and also flower plants. The large trees in these gardens, quite naturally, provided shelter to many animals and birds, i.e., cuckoo (*koel*), sparrow (*gaureya*), weaver bird (*baya*), lark (*lava*), parrot (*tota*), peacock (*mor*), pigeon (*kabutar*), crow (*kauva*), monkey (*bandar*), *rabbit* (*khargosh*), deer (*hiran*) and creatures like squirrel, mongooses and even ducks, swans and fishes in the beautiful ponds.

During the Mughal period, a number of herbs were used in the form of medicines. These herbs, viz. Indian figs, pepper, ginger, clove, cardamom, camphor were used to cure various diseases, like fever, cold maw, for foul smelling, sharpen the memory, smelling and evil humours, etc. It establishes that the Mughals were knowledgeable keenly interested in the growth of the herbs and medicinal plants of this country.

The most important contribution in the field of wild life, for which the Mughals must be remembered in history, was their organised system of management, treatment of the animals and the breeding of birds and animals even in captivity. The Mughal emperors particularly Akbar and Jahangir organised a management system to keep the animals and birds for various purposes. Abul Fazl mentions in the *Ain-i –Akbari* that Akbar kept a number of animals, like, *cheetahs*, elephants, deer, camels, horses, goats, domestic cows and wild buffaloes. All these animals were categorised and each category of animals was given under the charge of an official. While a number of keepers and servants were there to look after these animals. Abul Fazl mentions about the breeding of the elephants and a number of equipments which were used to keep them under an organised management system. Similarly Jahangir

also played a crucial role in the management, treatment and breeding of the birds and animals.

On the other hand, the Mughal miniatures contain a lot of information on the wild life of the Mughal period. It is true that with the inception of the Mughal rule in India, painting received a mighty impetus. Thus, the greatest contribution to the Mughal paintings in Indian art was the portrait-painting. During Jahangir's time most of the pictures of birds and animals were drawn by Mansur, Manohar and Abul Hasan. So, the miniature painting reflects the wild life of the Mughal period. The unique feature of these paintings is the depiction of animals and birds in their real form. Additionally, the border designs and the pages of the calligraphy are fully decorated with a number of flowers, plants and a great variety of animals. All these form an integral part of the present study. Undoubtedly, the whole panorama of Mughal pictures on nature history set in marvellously and uniquely laid background represent, in its true spirit and characteristics, the vary quintessence of nature's endless variety of nature and beauty.

Chapter - I

Babur and Jahangir : The Naturalists

BABUR AND JAHANGIR : THE NATURALISTS

The first stone of the splendid fabric known as the Mughal empire in India was laid in A.D. 1526 by Babur who was of mixed blood, part Turk and part Mongol. On his father's side he was a direct descendent of Timur, while on his mother's side he derived also from Chingiz Khan. His career began in his twelfth year in the petty kingdom of Ferghana in Central Asia and ended in his fortyeighth years in India, the land of his new acquisition by conquest. These years sum up the life of one of the most attractive characters of history. He was a soldier of fortune, a man of fine literary taste, and even more than that an artist dwelling on the beauties of nature.[1]

Babur's life with all its exciting adventures and romantic details, and his expressions of delight in the works of God, are graphically preserved in his autobiography, the *Baburnama*, or *Tuzuk-i-Baburi.* The Memoirs reveal his personality and give a vivid account of his daring exploits, of the places he visited and things he observed.[2]

Although Babur had to pass much of his time in tents and could not lead a peaceful and leisurely imperial life like some of his descendants, yet his love for natural beauty and landscape is undisputed. 'The Mughal dynasty as a whole was so keenly interested in the arts, that each emperor' as he came into power, put something of himself into the paintings done during his reign".[3]

Babur who contributed a lot to the artistic development in India, was not admired for it in his life. All his efforts in that direction were appreciated

1 . Shanti Swarup, *Flora and Fauna in Mughal Art*, Bombay, 1983, p. 18.
2 . Ibid., p. 18.
3 . Percy Brown, *Indian Painting under the Mughals*, Oxford, 1924, p. 49.

after his death. Babur a man of aesthetic spirit, outstanding ability a high ideal bequeathed a culture which inspired love and appreciation for art and learning in all his descendants.[4]

The memoir of Babur is a gearing proof of his love for scenery, flowers and natural effects. He had an expert artistic eye which inspired him to write about the beauty of the campfires twinkling below him. It is also a fact that 'Babur was a learned philosopher, mightily hunter, an enthusiastic traveler, an unstable sight seen, an eager student of the habits and appearances of animals and birds. He was keenly devoted to flowers and gardens and beauties of nature'.[5]

The section of the *Baburnama* which deals with India is the first illustrated natural history of India. As Babur came from central Asia and Afghanistan, which do not have seen that variety in flora and fauna as India. A keen observer and lover of nature who delighted in plants and gardens, he was amazed by what he saw in India. He is the first person to record the birds, animals and plants of India. His description of plants, birds and animals are brief but patient.[6] Apart from its value as a source book of history, the importance of the *Baburnama* lies in the fact that it is the first book on natural history of India. Babur had keen sense of observation and he describes the physical features of the country, its people, animals, birds and vegetation with precision and brevity. The value of some of the illustrations of the *Baburnama* lies in the fact that these are the first natural history paintings in India.[7]

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4. Meraj-un-Nisan, *Art & material culture during Jahangir's reign*, Ph.D. Thesis, M.A. Library, A.M.U. Aligarh, p. 2.
5. Percy Brown, op.cit., p. 51.
6. M.S. Randhawa, *Paintings of the Baburnama*, National Museum, New Delhi, 1983, p. 16.
7. Ibid., p. 9.

Writing about the flora of India he speaks with delight of the beautifully coloured flowers of the 'Jasun' seen like a heart amongst its expanded petals. "Some Hindustanis call it Gaznas. It is not a grass, its tree (is in stems like the bush of the red rose), it is rather taller than the bush of the red-rose. The size of the *Jasun* may be of the red rose".[8] And of the five petalled '*kaner*' (oleaner) which grows both red and white. Like the peach flower, it is five patelled. It is like the peach bloom (in colour?), but opens 14 or 15 flowers from one place, so that seen from a distance, they look like one great flower.[9] The *Kiura* of excellent perfume flowering within long leaves pressed together bud like, and the wildly growing '*Mahua*' flowers which have a sweet and spirituous taste. The tree's singular appearance notwithstanding, it has flowers perhaps 1½ to 2 *qarish* (13½ to 18 inches) long.[10] The white jasmine which Babur found larger and more strongly scented than the yasmin flower of Ferghana. The Hindustanis call it *champa*.[11]

Among the trees he writes of the very good looking plantain and how it produces bananas. The mango and its fruits which are best in India, the different varieties of palms and oranges, besides the tamarind, the mimusops, *ambli*, *Mahuwa*, *Jamun*, *Kamrak*, jack fruit, monkeyjack, lotefruit, *Karunda*, *paniyala*, *Gular*, *amla*, *chirunji*, *tari*, *sadapal*, lemon, amrdfal, etc.[12] The great lover of nature was by no means less sensitive to the charms of the fauna of India. He writes in detail and with enthusiasm about a number of animals and birds of India, and his observations are remarkable literary pieces of zoological

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8. Babur, "*Baburnama*" tr. by A.S. Beveridge, vol. II, London, 1921, p. 513.
9. Ibid., p. 514.
10. Ibid., p. 514.
11. Ibid., p. 514.
12. Ibid., pp. 504, 503, 505, 86, 07, 08, 09, 10, 11, 12, 13.

statistics. He describes the immense size and sagacity of the elephant, and how it eats and drinks with its trunk and uses its tusks in fighting or in felling trees and knocking down wells.[13] He gives interesting data to distinguish the different species of monkeys[14], and notices the affinity between the rhinoceros and the horse, and between the squirrel and the mouse. He also writes about the crocodiles, wild buffallo, blue bull (*nilgai*), the deer, gini-cow, *nawal*, *kalak*, and also aquatic animals like water tiger, *siyah-sar*, water-hog (sea-pig), frogs, fishes, etc.[15] among the birds he notices peacocks, floricans, monal peasants, herons, hoopes, pigeons, ducks and pelicans, and separates and describes five types of parrots.[16]

The flowering paradises were dearest to Babur. Beautiful little gardens full of trees and plants with all the freshness of their green shadows, and brightness and perfume of the many hued flowers, fascinated him from his childhood. He went into ruptures at the sight of the colour of an autumn leaf, the sweetness of the violets and roses in bloom, the field of tulips of thirty four different kinds, or the running streams of water in the garden by the side of which he would sit to gaze at the beautiful world. Such sensitiveness led him to garden laying.[17]

Babur idea of a garden was based on the ideal of a terraced garden from Persian traditions. Garden craft was a national art in Persia. It took a terrace shape in descending stages, where each terrace had a '*char-bagh*' or four-quartered plan with paved paths, and such ornamental features as parterres of

13. Ibid., p. 488-89.
14 Ibid., p. 491.
15. Ibid., pp. 489, 99, 90, 91, 501-503.
16. Ibid., pp. 504-506
17. Swarup, op.cit., p. 18.

shrubs and flowers, avenues of deep toned cypress trees, sprays of rosy almond or silvery flowering plum trees, and water safety rippling from one terrace to another in a series of water falls. He built at least ten such gardens in Kabul, one of which later became his final resting place, and the other was named as the *Bagh-i-Wafa* (Garden of fidelity), with its lake bordered by oranges, citrus and pomegranates. His favourite place was the fountain of the three friends, where he loved to sit and talk with his closest friends. About it he said, 'when the flowers are in bloom, the yellow mingling with the red, I know no place on earth to compare with it'.[18]

But laying the garden at Agra, after fixing on it as his capital in India, proved a difficult task. 'We crossed the Jun-water'[19] to look at garden grounds a few days after returning Agra. Those grounds were so bad and unattractive that we traversed them with a hundred disgusts and repulsions. So ugly and displeasing were they that the idea of making a "*char-bagh*" in them passed from my mind.[20] Later, however, the same grounds were chosen for planting gardens and plots were laid out with order and symmetry, with suitable borders and parterres in every corner and in every border rose and narcissus were planted in perfect arrangement. At least three great gardens in Agra are attributed to Babur himself. Among the gardens at Agra, the *Bagh Gul-i-Afshan,* later named as Aram *bagh*, and now popularly known as Ram *bagh*, is the only one which has survived today almost intact. It is a grand garden in four distinct terraces, fulfilling all the necessary conditions and containing all the resultant beauties of a terraced garden. The main terrace has eight raised

18. Ibid., pp. 18-19.
19. The river Yamuna.
20. *Baburnama*, vol. II, p. 531.

platforms in symbolic imitation of the *Bagh-i-Hasht Bihist*, or the 'Garden of eight paradises' already laid out at Tabriz at the end of the 15th century. He also ordered a lotus garden, the *Bagh-i-Nilofer* at Dholpur. Later Akbar's historian Abul Fazl noted that it was only after the arrival of Babur in India that a more methodical arrangement of gardens was seen and travelers admired the beauty of the garden places and their murmuring fountains.[21] Undoubtedly Babur's greatest contribution to India's beautification was his introduction of terraced gardens into this country. As two modern writers observe, "the Gardens created by the Mughal dynasty rank as one the great landscape traditions of the world. Their characteristics are strong and their sense of design impeccable".[22]

Babur indeed was a great nature lover and naturalist. 'Considering the age in which he lived he can rightly claim to be the first natural history scientist of India'.[23]

Jahangir, the fourth Mughal emperor (r. 1605-27), was also a lover of beauty, be it that of an artifact created by human hands or that observed in nature, the work of God. His Memoirs, commonly known as *Tuzuk-i-Jahangiri* or *Jahangirnama*, are as much album of his aesthetic experiences as a chronicle of his reign. With his keen sensibility, these experiences were a permanent source of joy for him. Nature and beauty were preserved through the brush of his artists.[24] *Tuzuk-i-Jahangiri* gives long descriptions of Jahangir's love for nature and its objects, animate or inanimate. His keen observation of all these objects led him to think with devotion for them and also to provide

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21 . Abul Fazl, *Ain-i-Akbari*, tr. H. Blochmann & H.S. Jarrett, Vol.I, Delhi, 1977-78, p. 93.
22 . Sylvia Crowe and Sheila Haywood, *The Gardens of Mughal India*, London, 1972, p. 44.
23 . M.S. Randhawa, *Roop Lekha*, vol. XLII, Nos. 1-2, p. 14.
24 . S.P. Verma, *Flora & Fauna in Mughal Art*, Marg, Mumbai, 1999, p. 83.

opportunities for their love and adoration. During his reign the art of painting reached its high water mark.[25]

Jahangir was a naturalist of the first order, with a strong curiosity for facts. He was deeply interested in nature. He always looked at nature with the eye of a poet or a naturalist and everything that was charming, beautiful, and unique attracted his attention. He was so much curious about various kinds of birds, animals, flowers and plants.[26] He maintained a rich menagerie and an aviary, managed by expert officials and a team of workers under his personal supervision. Regular records were kept of each individual specimen, as also of such information as he desired to acquire. His investigations have been found to be of immense scientific value.[27]

However, Jahangir with the core as well as with his description of various flora and fauna objects their analysis as a proof of obvious. The *Tuzuk* is exclusively devoted to 33 species of animals and to the eleven species of plants; of them some are represented by their fruits or flowers. These sections also contain Jahangir's references to thirty three species of animals and fifty seven species of plants, showing their distinguishing characteristics, ecology, anatomical notes, habits, local names, weights measurements. The memoirs of Jahangir though primarily a historical document of his reign is full of information on natural history and its attachment with them accuracy is still undisputed. A big aviary and menagerie were established under Jahangir's

25. Meraj-un- Nisan, op.cit., pp. 55-56.
26. Jahangir, *Tuzuk-i-Jahangiri*, ed. H.Beveridge, tr. A.S. Rogers, vol. I, London, 1909, p.140
27. Salim Ali, The Mughal Emperors of Indiaas Naturalist and Sportsmen, *The Journal of the Bombay Natural History Society*, No. 31-32, Bombay, 1926, p. 2

order; they were required to carry out observations, tests and experiments about the appearance, habits and characteristics of birds and beasts.[28]

Looking at his deep and unusual interest his agents and officials procured birds and animals which would please him (and thus gain his favour). Jahangir has recorded numerous instances when rare, uncommon, and foreign specimens were presented to him be it a giant *markhor* (a wild goat), a huge elephant, a rare flying mouse, a turkey cock, a tail less monkey, an Abyssinian zebra, a tibetan yak, an African elephant, an albino *cheetah*, a *shahin* falcon, a sumatran loriquet, a European hunting dong or a jacob sheep, the malted polecat of Afghanistan, pheasants of Himalayas. What is most rewarding is the fact that he decided to illustrate his descriptions in the *Jahangirnama*. Some of his hand-picked painters were ready at hand to draw their faithful likeness, many of which have survived. Mansur was undoubtedly the most accomplished natural history painter of his time[29] and held the title of *Nadir-ul-Asr*(wonder of the age). Jahangir's love for nature urged the foreign dignitaries, his own nobles, traders and even commoners to present to him the gifts of rare animals brought from far and wide and they were taken to be as an addition to his knowledge. Though kinds of carnivorous beasts, hunting birds and domesticated species found space in the royal establishment, but for him the rare one's were of main attraction. Of special interest are Jahangir's notices of uncommon, strange, and exotic animals. Gifting a curious looking animal could guarantee foreign emissaries and visitors a quicker audience than costly jewels. Humble bird catchers and animal trappers could expect rich rewards for

28. M.A. Alvi & A. Rahman, *Jahangir the Naturalist*, New Delhi, 1968, p. 4
29. A.K. Das, *Mansur*, *Ustad* Mansur, *Lalit* Kala, No. 17, 1977, p. 45.

offering living curious. Among the important duties of his officers in the coastal areas was of acquiring exotic species and making proper arrangements for their transportation to the capital. Henry Beveridge observes that Jahangir would have been a happier man had he been the head of a museum of natural history.[30]

The flora and fauna was very much delightful to Jahangir's heart. The most important thing was that Jahangir himself managed a big aviary and a menagerie which were full of all kinds of birds and beasts.[31] It was in his nature that he used to observe all the habits, characteristics and the appearances of these birds and beasts. It shows that Jahangir was a keen observer and he wrote all these interesting things in his memoirs. The Emperor Jahangir's description of the animals was very accurate and scientific. He allotted local names geographical distribution, structural characteristics, weights and measurements and interesting notes on ecology and behaviour. His description of crane and the gestation period of the elephant is a valuable contribution to subject as well as very helpful to the modern zoologist. The emperor's zoological experience and explanation was so wide and accurate that till today it has maintained its authenticity.[32]

He describes the albino varieties among animals like squirrel, the antelope, the gazelle, and a tiger having spots of blue colour on a white body inclined to bluishness. Similarly his description about a number of the birds

30. *Tuzuk*, op. cit., Vol. I, p. 150
31. Shanti Swarup, op.cit., p. 22.
32. Alvi & Rahman, op. cit., p. 5

like falcons, hawks, sparrows, crows, partridges, floricans, quails, and peacocks, parrots, pigeons, wagtail bird, blue bull is really remarkable.[33]

The description of a monkey which was strange and wonderful by look, struck very much to the mind of Jahangir. Although it had the normal hands, feet, ears, and head, its face was like that of a fox, the colour of its large eyes resembled the hawk's eyes; its hair was like the wool of a sheep. Its tail hanging down like that of a cat and sometimes it made a sound like a young antelope.[34]

The elephants were his favourite animals. He watched the period of their gestation and informs us that it was 18 months for a female young one and 19 months for a male. He narrates the birth of a young one in his presence and notes that the elephant, unlike the humans was born with its feet first, and makes towards its mother's breasts. It was a gesture of deep concern for his elephants that he had ordered the water to be made lukewarm during winter before they took their bath in it.[35]

Among the birds the *koel* fascinated him. He narrates its characteristic features in detail and distinguishes it from the crow. He describes that the *koel* is a bird of the crow tribe, but smaller. The crow's eyes are black, and those of the *koel* red. The female has white spots, but the male is all black. The male has a very pleasant voice, quite unlike that of the female. It is in reality the nightingale of India. Just as the nightingale is agitated and noisy in the spring, so is the cry of the *koel* at the approach of the rainy season, which is the spring

33 . *Tuzuk.* op. cit., vol. I, p. 272, 387, 104-5, 351.
34 . Ibid., vol. I, p. 216.
35 . Ibid., vol. I, p. 410.

of Hindustan. Its cry is exceedingly pleasant and penetrating, and the bird begins its exhilaration (*masti*) when the mangoes ripen. It frequently sits on the mango trees, and is delighted with the colour and scent of the mango.[36]

The *saras* was another bird that captivated Jahangir's affection. He had a pair of them, named Laila and Majnun by him, and they were always soused in a special enclosure put up near his own. A continuing story pieced together from scattered paragraphs in the *Tuzuk-i-Jahangiri* over several months illustrates his affection for these birds. As he was very much wished to record how they muted from personal observation, he gave orders that at the next signs of love-play he should be informed immediately. Consequently, one early morning on receipt of such information, he rushed to the scene to witness the event, and later wrote: "The female having straightened its legs bent down a little. The male then lifted up one of its feet from the ground and placed it on her back, then afterwards, the second foot, and immediately seating himself on her back paired with her. He then came down, and stretching out his neck put his beak to the ground, and walked once round the female". The emperor adds: it is possible they may have an egg and produce a young one. Jahangir records that some time afterwards the birds made a nest and the female laid two eggs. Then both the male and the female birds took regular turns at sitting on the nest in order to hatch the eggs. The signal for a change in the duty used to be a sharp peck in the back of the bird sitting on the nest from the bird ready to sit. Later the emperor noticed that in the cold and rainy weather the birds would sit for much longer periods, perhaps to minimize the amount of damp air that could reach the eggs. In due course of time, both the eggs hatched, one after 34

36 . Ibid., vol. II, p. 7.

days and the other after 36. The mother fed them with locusts or grasshoppers from her mouth. But the father teased them by holding the chicks in his beak upside down by the leg. Jahangir however managed to restrain him from doing so. Soon the cries of the new family were attracting wild cranes, one of which was captured and was ringed personally by Jahangir before its release.[37]

Describing Agra, Jahangir particularly noticed Indian flowers and trees 'From the Excellencies of its sweet scented flowers one may prefer the fragrance of India to those of the flowers of the whole world.[38] He then marveled at the very symmetrical and large tree of the *Champa*, full of branches, leaves and flowers of exceedingly sweet fragrance. It has the shape of the saffron flower, but is yellow inclining to white.[39] Next to it this was the white Keora flower with a scent so strong and penetrating that it did not yield to the odour of musk. Similar in nature was the yellow *ketaki* flower.[40] The *chambelli* is the white jessmine of wilocyat (Persia or Afghanistan), they extract sweet scented oils.[41] He noticed the double and treble flowers of the Rae-bel exuding a fragrance that reminded him of the white jessamine.[42] The *Mulasari* attracted him as another elegant tree with flowers of very pleasant scent. The flower of the lotus, which in the Hindi, language they call *Kumudini*, is of three, colours – white, blue and red. I had already seen the blue and white, but had never seen the red. A scene which remained memorable in the record of his experiences was a tank full of exquisite lotus blossoms of the red colour the like of which he had not seen before. He particularly observed the *kanwal*

37. Ibid., vol. I, p. 343; vol. II, pp. 16, 23, 25, 32, 39, 42, 60.
38. Ibid., vol. I, p. 5.
39. Ibid., vol. I, p. 5.
40. Ibid., vol. I, pp. 5-6.
41. Ibid., vol. I, p. 6.
42. Ibid.,, vol. I, p. 6.

and the *kumudini* varieties of the lotus, the former opening during the day and becoming a bud at night, and the latter opening only at night and budding a new in the day time, and watched how the romantic black bee stayed inside the closed blossoms to drink the sweet juice and come out after the petals had again spread open.[43] Jahangir pointed out that when Mirza Rustam and Khwaja Abdul latif were appointed to the Deccan, there on Sunday, the 5tyh I saw a flower, white inside, and red outside, while some of them were red inside and yellow outside. In Persian they call it *La'la-i-bigana*, and in Hindi *thal Kanwal. Thal* means land, and as the lotus (*kanwal*) is an aquatic plant, they have called this land lotus".[44]

Another such occasion when Jahangir came to know about some strange flowers was very pleasant. He himself says that "on Friday, the 8th having traversed nearly 4 *kos*, I halted at the village of Baltar". There was no *kotal* on this road. It was broad and plain after plain, and mead after mead, of flowers sweet smelling plants of narcissus violet, and strange flowers that grow in this country, came to view. Among these flowers I saw (noticed especially) one extraordinary one. I had five or six orange flowers blooming with their heads downwards. From the middle of the flowers there came out some green leaves, as in the case of the pineapple (?), round which are small flowers of the shape and colour of the jasmine, some blue in colour and some red, with yellow points in the middle, exceedingly pretty in appearance: its name is "*ladar push*". They call it *push-i-aliyyu-e-umum* (the common push ?). There are many yellow *arghawan* (Judas trees) on the road as well".[45]

43 . Ibid., vol. I, p. 6.
44 . Ibid., vol. I, p. 412.
45 . Ibid., vol. II, p. 122.

It was his deep love for nature that he visited Mandu where he found the verdure and self grown fragrant plants blooming to such a degree that on all sides on which the eye fell the place looked like a world of greenery and flowers. In the *subah* of Malwa he was also delighted to see the mango trees, large, green and pleasant, a banyan tree which was exceedingly large, and a tamarind tree which was somewhat strange because its trunk was very straight and well shaped.[46]

As regards his interest in botany, it was mainly horticultural (*Tuzuk*) contains his inclination for the plantation of high altitude trees like the Cypress, the pine, the *chenar*, the white poplar, the bid *mulla, jawanese* sandal trees in the plains of India. He also discussed about the banyan tree, the tamarind tree, *palas* tree, and tree oak.[47] He had good knowledge of fruit bearing trees and also about their presentation. Mango was one of his most relished fruits. For him date tree looked very graceful and he ordered the painters to give a platform around a date tree and be represented in colour, but the paintings of those plants, trees and flowers are not traceable today e.g. more than a hundred of Kashmir flowers painted by Mansur alone not a single one has survived to this day.[48]

Despite a very interesting explanation of wild animals and birds, Jahangir also took his keen interest in observing and acquitting with the different varieties of fruits. He pointed out so many fruits but he focused on mango, plantain, grapes, apples, melons, pomegranates, cherries, peaches, apricot, bananas and oranges. He described that "as the day of the *Dasahara*

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46. Ibid., vol. II, p. 134.
47. Swarup, op.ti., pp. 21-22.
48. *Tuzuk*, op. cit., vol. I, pp. 6-7, 97, 104, 360, 353, 351.

had been fixed as the timing of starting, I embarked on a boat with all happy omens and pleasure in the evening, and went on to my goal. I halted for eight days at the first stage that the men night comes on, after making all preparations at leisure. Mahabat Khan had sent apples from Bangash by runners (*dak choki*). They arrived very fresh, and were of excellent flavour. I was greatly pleased in eating them. They can not be compared with the *sil-i-Khub* ("the good apples"?) of Kabul which I ate there or with the samarkand apples, that they bring every year. For sweetness and delicacy of flavour they can not be compared with either of the latter (i.e. the Bangash apples were far better). I had until now never seen such delicate and delicious apples".[49]

"On the 24th news came that Maha Singh, grandson of Raja Man Singh had died at Balapur in the province of Berar. Same day they had brought to my private fruit house many mangoes from all parts of the province of the deccan, Burhanpur, Guajrat, and the pargahans of Malwa. Although his province is well known and celebrated for the sweetness, freedom from stringiness, and size of its mangoes, and there are few mangoes that equal to its mangoes".[50] Similarly Jahangir described about the peaches. He pointed out that the peaches also are very delicious and plentiful. They had brought some peaches from Istalif. Not withstanding the sweetness of Kabul fruits, not of them has, to my taste, the flavour of the mango.[51] Furthermore he described "several sorts of grapes, such as the *sahibi* and the *habshi* and the *Kishmishi*, became common in several towns, for instance, in the bevars of Lahore every kind and variety that may be

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49 . Ibid., p. 100.
50 . Ibid, vol. II, p. 101.
51 . Ibid., vol. I, p. 377.

desired can be had in the grape season.[52] Next to it, Jahangir discuses about the wild plantain and golden plantation. About wild plantation he said "as it had been several times mentioned to me that a kind of sweet meat was obtained from wild plantation such that dervishes and other poor people made their food, I wished to enquire into the matter. What I found was that the fruit of the wild plantation was an exceedingly hard and tasteless thing. The real fact is that in the lower part (of the trunk) there is a thing shaped like a fir-cone from which the real fruit of the plantation comes out. On this a kind of sweet mean forms which has exactly the juiciness and taste of *paluda*. It appears that men eat this and enjoy it". In the similar way he pointed out some *Sona-kela* (Golden plantation bananas) of which I had never come to know. In size they are one finger, and are very sweet and of good flavour".[53]

For him Kashmir was the perpetual spring garden.[54] He visited Kashmir first when he was still a prince, and was charmed with the exquisite petals of the saffron flower, and the flaming orange blossoms of the *palas*. He noticed also the beauty of a hundred plane trees gracefully giving shade to a plot of ground, pleasant and green. In a next visit after occasion to the throne he was thrilled with joy at the sight of green meadows interspersed with the hibiscus flowers in bloom, or an unidentified flower flaming like a sun set afire, or the fragrant wild violets and narcissus blossoming on the hill slopes which lingered long in his memory. An unusually beautiful combination of five or six orange flowers blooming with their heads downwards and from the middle of which came out green leaves, was the *Bulanik* flower of Sriangar. Another

52. Ibid., vol. I, p. 116.
53. Ibid., vol. I, p. 5.
54. Ibid., vol. I, pp. 386, 397.

exceedingly pretty flower in appearance was the *Ladar pusi* around which bloomed masses of small flowers of the shape and colour of jessamine, some blue and some red with yellow points in the middle. He also noticed sweet scented pure white jessamines, or of the colour of sandal wood, several varieties of red roses, and a flower of light yellow colour with an extremely delicate fragrance.[55]

Kashmir indeed was 'a page that the painter of denting had drawn with the pencil of creation. The buds of hearts break into flower from beholding it'. At Srinagar he designed and constructed the Shalimar *bagh*, which is regarded as one of the best terraced gardens in the world. The Shalimar *bagh* in Srinagar is his best tribute to the nature. The garden with a canal in the centre with water liters floating upon it, flowery hedgerows, lonely *chenar* and cypress trees forming avenues, rose bushes and fragrant flowers bordering the long lines of water ways, trees alongside the enclosing walls. Square plots reserved for fruit trees and flower parterres, are some of the features of this garden which make it the very abode of peace and tranquility.[56]

His observation of birds, animals and plants was very minute and his wife Nur Jahan had the same love of flowers which her husband had, and she also contributed considerably to India's adornment through garden planning and construction. The garden of Jahangir 's tomb at Lahore with separate plots allotted to a single flower variety like tulips, violets, roses, poppies, lilies, anemones and red cyclomen, the deep unending shadows of the cypresses in symmetrically laid out avenues, and the roses bushes bordering the raised

55. Ibid., vol. II, p. 81,.
56. Swarup, op.cit., p. 22.

walks. Jahangir's love for novelties and collection of exotica were not restricted to the visual and decorative arts only, but extended to natural history, to rare and beautiful animals, plants and trees. He would not only show his curiosity but also describe them in detail, in the *Tuzuk* and instruct his painters to keep accurate likenesses of them. Thus, in Jahangir's period we find a large number of miniatures representing out of the way subjects.[57] It would not be unfair to call him nature war shipper.

57. A.K. Das, *Mughal Painting During Jahangir's Time,* Calcutta, 1978, p. 21

Chapter 2

Wild Life in Mughal Paintings : Manuscript Illustrations, Album Pictures and Margin Paintings

WILD LIFE IN MUGHAL PAINTINGS: MANUSCRIPT ILLUSTRATIONS, ALBUM PICTURES AND MARGIN PAINTINGS

The paintings of Mughal period depict wild life in manuscript illustrations, album pictures and margin paintings. These miniatures exhibit a great variety of flora and fauna and provide rich source material for the history of wild life. The paintings of medieval period generated at the Mughal court, exhibit a great variety of flora and fauna. The painters of this period carefully observed nature and especially the habitat of the birds and animals.

During the early period, i.e., before sixteenth century, naturalistic drawings of flowers and plants or of animals and birds as individual studies were not in vogue. But during the late 16th century, the full page characteristic studies of flowers and plants as well as animals and birds appear besides their picturisation in groups, in hunting scenes, etc. During the time of Jahangir (r. 1605-1627), the paintings are, in general, derived from the natural life. These studies of wild life are the result of the most careful and intimate observation of the subject.

Illustration Manuscripts and Album Pictures :

The manuscript paintings are in conformity of the text and depict a theme related to an event. Themes related to hunting, animal-fights and trapping of birds and animals, etc., appear in context of their references in the manuscript. The hunting of animals was a royal game, therefore it is the main subject of several Mughal miniatures. These miniatures exhibit a great variety of animals. Even though in such compositions the animals are drawn in

groups on small scale, these are always identifiable. Besides, various species of plants and flowers are also depicted in the Manuscript illustrations. The album pictures of flora and fauna mainly developed during the reign of Jahangir. Jahangir further encouraged to the already existing importance of pictures as wild life. A large number of pictures of birds and animals, mostly ascribed to Abul Hasan, Govardhan, Inayat, Mansur, have survived. All of them served under Jahangir. We are told that in 1612, Jahangir ordered Mansur to draw the Likeness of a falcon brought from Persia.[1]

The independent studies of birds and animals are depicted in profile and generally single in composition, dominating the picture plane. These album pictures, accommodating the central theme more spaciously, allow the maximum details. The drawing of single animal in composition is not violent in action, but it is representative of the technical finesse presented with refined workmanship in the album pictures Jahangir's deep interest in birds, animals and flowers opened a new prospect for the Mughal artists. On account of the emperor's keenness to have a correct pictorial record of the wonders of plant and animal life, which everybody had seen, the artists, who accompanied on his journeys or campaigns, were specially commissioned to paint for him any rare bird or animal which was brought to court. Under Akbar these subjects had received only a secondary place in painting. But under Jahangir the paintings of flower, birds and animals absorbed a whole page, drawing attention to themselves in their own right. In album pictures the figures occupy whole page.

1 Jahangir, *Tuzuk-i-Jahangiri*, tr. A. Rogers, ed. H. Beveridge, vol. II,New Delhi, 1909, p.107-8.

Here my attempt is to deal with important themes which are illustrated in major Manuscripts, i.e., *Baburnama, Akbarnama, Anwar-i-suhaili & Ajaib-al-Makhluqat* which contain representative examples of birds and animals pictures in addition to the flora of India. These are the important themes include hunting scenes, animal-fights, trapping of birds and animals, Portraits: single or in groups both.

In Manuscript illustrations hunting was one of the main themes and during Akbar's reign the painters mostly concentrated on the hunting scenes. The hunting themes seem handy to the Mughal painters. Keen observation of nature, vivid portrayal of the animal life, violent action reported in human and animal figures, variety of postures, minute depiction of details and the natural surroundings characterize the hunting scenes. The animals belonging to different species are crammed in one place in a *qamargah* (a hunting circle). Among the animals the deer specially the black-buck has fascinated the painters most and has been sparingly depicted in the outdoor scenes. In the *Baburnama* manuscripts there are many paintings which illustrate hunting event. An illustration of the *Baburnama* (f. 283 b & 284a, B.M. London) depicts a *qamargah* hunt in which Babur riding on the horse back is giving a blow of sword on the neck of *Kiang* (wild ass).[2] Babar writes that "on this occasion he galloped after a wild ass sot off two arrows one after another but it did not harmed the ass after that he chopped with his sword at the nape of the neck behind the ears and cut throw the wind pipe, this stopped him and after some time, it fell down and died."[3] In this painting there are also shown

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2 Hamid Sulaiman, *Miniatures of the Baburnama*, Tashkent, 1970, pl. 42.

3 Babur, *Baburnama*, tr. A.S.Beveridge, vol.II ,London,1921,p.460.

other animals like deer, *nilgai*, jackal and numerous species of antelopes which were hunted. The *qamargah* is entirely surrounded by men, and the system is well organized. There are a number of hunters, or the helpers who made efforts to drive the animals by shouting and on other ways in to the hunting circle. (plate1)

Another illustration of the *Baburnama* (f. 305b, B.M., London) depicts a hunting scene where Babur is shown riding on a white horse and looking at the hunted rhinoceros. A large number of hunters and attendants accompanied him in hunting expeditions. About his hunting campaign, Babur also writes, that on 16th February he went to hunt the rhinoceros on the sides of Swati which was a place of called *Karg-Khana* (rhino-home) by the people.[4] Here only a few rhinoceros were discovered since the jungle was dense and they did not come out of it. Suddenly we noticed a calf and started chasing. A number of arrows were shot at it but it rushed into the near jungle, after that the jungle was fired but that same rhinoceros was not found. Then another calf was killed as it layed. Scorched by the fire each person participated in this hunt took a share of the spoil. After leaving Swati, they wandered about a good deal; it was the bed time prayer when we got to camp.[5] (plate 2)

Next to it, another *Baburnama*(f. 243, N.M., New Delhi) painting depicts a *qamargah* hunting scene where Babur riding on the horseback is occupied with hunting deer. The emperor is shown using bows and arrows while a large number of companions are also enjoying this *qamargah* hunt.[6]

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4 Hamid Sulaiman, op.cit., pl. 46. For reproductions see also M.S. Randhawa, *Paintings of Baburnama*, National Museum, New Delhi, 1983, pl. 75.

5 *Baburnama*, op.cit., p.378

6 Randhawa, op.cit., pl. 81.

Babur describes this event as fallows, "On Saturday 29th we hunted the hill between 'Ali-Shang and Alangar. One hunting circle having been made on the 'Ali-Shang side, another on the Alangar in which deer's were driven down off the hill, and many were killed. Returning from hunting, we dismounted in a garden belonging to the Maliks of Alangar and there had a party".[7] Apart from this, there are few other animals in the painting like, jungle cats, jackals, and antelopes, etc. (plate 3)

A miniature of *Baburnama* (f. 193, N.M., New Delhi) depicts a hunting scene represents Babur hunting different kinds of animals on while riding on the horseback. He is shown hunting a black buck with a spear and his attendants also chasing deer and wild ass with their bows and arrows.[8] Babur writes, Sherim Taghai and other observers of *Kiyik* (wild ass) in Mughalistan said with surprise. "Even in Mughalistan we have seen few kiyik so fat, I shot another wild ass, most of the wild asses and deer brought down in that hunt was fat, but not one of them was so fat as the one I first killed".[9]

A miniature from the *Akbarnama* (I.S. 2/1896, Acc. No. 92/117, V.A. Museum, London) depicts Akbar hunting the black bucks and deer with the help of trained *cheetah*. In the upper portion of the painting, a horse rider is also shown with a trained *cheetah* seated on flat wooden platform fastened at horseback. In the lower portion of the painting a bullock cart is further shown carrying the trained *cheetah*. A few other huntsmen are also shown and they appear busy in hunting campaign.[10] (plate 4)

7 *Baburnama*, op.cit., p.357.
8 Randhawa, op.cit., pl.65.
9 *Baburnama*, op.cit., p.380.
10 Geeti Sen, *Paintings from the Akbarnama*, New Delhi, 1984, p. 46, pl. 10.

Another miniature of *Akbarnama* (I.S. 2/1896, Acc. No. 17/117, V.A. Museum, London) depicts a scene in which Akbar's cavalcade was attacked by the tigers near the Narwar. The painting shows the whole dangerous scene in which a tiger advanced towards Akbar and was about to fall upon the emperor. But the emperor attacked on the tiger and cut its neck with a strong blow of his sword. Meanwhile a group of men in the accompaniment of Akbar attacked the tigers with matchlocks, swords, daggers, bows and arrows, etc. The entire scene seems to be like a battle ground between man and animals (tigers).[11]

A double page illustration of the *Akbarnama* (I.S. 2/1897, Acc. 55-56/177, V. A. Museum, London) depicts a *qamargah* hunt. It represents Akbar riding on a horse, and hunting the black buck, deer, antelopes, blue bull, ram wild fox, rabbit and asses also near Lahore. There are some trained *cheetah* as well shown falling upon the deer and black buck. A horse rider and a bullock cart driver are further shown in the lower portion of the painting. There are a number of other animals too. The entire hunting ground is encircled by the commoners.[12] (plate 5)

Another miniature of the *Akbarnama* (I. S. 2/1896, Acc. No. 84/117, V. A., Museum, London) shows Akbar hunting the wild asses (*garkhors*) in the desert.[13] In the middle portion of the painting Akbar, shown resting for a while seems very exhausted after the hunting campaign. His companions seem to be worried about the condition of the emperor, and are depicted offering him some water to drink. While on the other side hunted wild asses

11 Ibid., p. 68, pl. 20.
12 Ibid., p. 100-01, pl. 39-40.
13 Ibid., p. 136, pl. 60.

are shown lying on the ground. The marks of the bullet injury can be seen clearly on their bodies. Abul Fazl writes that, "the emperor having the gun in his hand approached for hunting wild asses when he saw the wild asses then he advanced on feet towards them. He killed the asses with his gun but soon because of the thrust he became speech less, all the companions were worried but soon the miracle happened and few divine persons appeared with water for his majesty then thank giving offered to God".[14] (plate 6)

A miniature of the *Jahangirnama* (Ms. Douce or a.i, f. 33r., Bodleian Library) also depicts a hunting scene in which a lion is mauling are of Jahangir's huntsman and the emperor is about to spear the lion through the back, his elephant rushing forward and endeavoring to help with his trunk.[15] A sword man, perhaps Prince Parwiz, has already struck the lion with a cutting blow. Other horsemen gallop to the rescue, and the victim's horse runs loose across the background. A person who is Sohrab Khan, he is on the elephant with Jahangir, carries a bow and arrow instead of a sword, and Price Parwiz normally appears on horseback, but here is on foot. There is also depicted different variety of animals like deer, ram, rabbit, cat, wild dogs and duck also. (plate 7)

Another miniature of the *Jahangirnama* (Ed. win Binney, 3rd collection, Sen Diego) again depicts a hunting campaign, of Jahangir, and the Prince Daniyal is shown as surveying a pair of *nilgai* shot by him. A trained leopard mauls a horned blackbuck from which he is about to be lured by its

14 Abul Fazl, *Akbarnama*,tr. H.Beveridge, vol.II, Delhi, 1972, p.160.
15 Toby Folk and Siman Digby, *Paintings from the Mughal India*, London, 1983, p. 33, pl. 15.

keeper. A corps of attendants stands behind the prince, same with swords, sticks, small game, cages and some with refreshments.[16] (plate 8)

An illustration of *Padshahnama* by Balchand (f. 134r., Royal library, Windsor castle) depicts a horrible scene in which Shah Jahan attacking a lion with his sword that has thrown down Anup Singh. It seems that emperor Shah Jahan is on a hunting expedition and there are many attendants and horse riders are well equipped with their weapons like, gun, sword, and bows and arrows.[17]

In another miniature of *Padshahnama* attributed to Hashim (f.219v, Royal Library, Windsor castle) the emperor Shah Jahan seated on an elephant's back is shown shooting lions near Palam. Here he is accompanied with Shah Shuja and Dara Shikoh. They are engaged in a hunt of a lion, standing with its female and two cubs. They are using arms including gun, spear etc. The hunting spot, a jungle scene is full of trees, plants and bushes, etc.[18]

Another hunting scene from *Padshahnama* (f. 164r, Royal Library, Windsor castle) Shah Jahan is depicted hunting deer with his gun near Palam. The land is uneven and crowded identifiable species of trees.[19]

An another miniature of the *Padshahnama* (f. 11A. 27, Chester Beatty Library, London) depicts Emperor Aurangzeb hunting *nilgais* at night on a hilly plain covered with trees and bushes from which a range of blue hills

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16 A.K. Das, *Splendour of Mughal Painting*,Bombay,1896, pl. IV.
17 S.C. Welch, A Schimmel, M.L., Swietochowski and W. Thackston, *The Emperor's Album, Images of Mughal India*, New York, 1987, pl. 18. p. 290
18 Ibid., pl. 20. p. 291
19 Ibid., pl. 21. P. 291

rises in the distance. His party has apparently come from a large city in the upper left with elegant mosques and palaces. He kneels on a red carpet supporting the barrel of his matchlock on the shoulders of two squatting huntsman. Two other huntsmen below hold male and female decoy *nilgais* on tethers. The emperor has just shot a male *nilgai* on the shoulder which rolls and falls as other members of the herd flee in panic. At a distance in the background, the master of the hunt and another officer await emperor's command. In the background there is another group of huntsmen with a third decoy animal and a large imperial entourage of carts, horses, and elephants.[20] (plate 9)

Another illustration of the *Padshahnama* (11A.28.C.B.Library, London) a fence of netting runs across the hunting ground with huntsmen stationed along the circumscribed area. In the foreground enclosure, the Emperor Aurangzeb, seated on an elephant is a sat called *howdah* with a young prince and four courtiers, aims his matchlock at a lion and the lioness isolated from their group. Besides, the royal elephant two more elephants also elaborately caparisoned carry four additional officers. In front of the party, a line of spearmen squatting on buffaloes, charging the pair of lions. All along the enclosure's edge, other lions and antelopes are seeking escape; two lions have attacked elephants ridden by huntsmen. The imperial hunting camp with its many tents can be seen in the distance beyond the fence.[21] (plate 10)

The *Anwar-i-Suhaili* which is an illustrated Persian abridgement of the Sanskrit text *Panchatantra* also presents a glimpse of the wild animals and

20 Linda York Leach, *Mughal and other Indian Paintings : From the Chester Beauty Library*, London, 1995, p. 498, pl. 48.
21 Ibid., p. 499,. Pl. 4.12

birds. Its illustrations based on wonderful fables represent the habitat on animals, their appearance and a lot of other things of the animal world. During the sixteenth century emperor Akbar took keen interest to in the illustrations of the fables of animal world.

A miniature of *Anwar-i-Suhaili* (f.1.113, C.B. Library, Dublin) presents a beautiful green landscape in which a lion condemns "*Dimna*". The lion and the jackal both seem engaged in a serious discussion. The lion shown seated in a majestic pose reflects his royalty, while the jackal stands before him, seems to be very obedient. In the midground *Dimna* is seen chained, while herons in a pool and frolicking rabbits appear in the foreground Apart from all these things a number of different trees also identifiable. In the right side of the lower portion there are two birds and two trees of dates.[22] (plate 11)

In another miniature of *Anwar-i-Suhaili* (1.133, C.B.Library, Dublin) a crow sitting on a tree seems to address a huge assembly of different birds like vulture, parrot, peacock, duck, cock, crane and many more. Most of the birds are in pair. Some pairs of these birds are shown flying high in the sky and a few are in a position as to descend to attend the assembly. The background is lush green and the depiction of the birds is realistic and they can be easily identified.[23] (plate 12) Another painting (f.1.146), shows a large number of crows assembled near a molly hill where a owl shown perched on the top of the hill in a very miserable condition and a huge flock of crows watches the fire lighted up in front of the owl's cave.[24] (plate 13) A miniature (f.1.157)

22 Ibid., p. 82, pl. 8.
23 Ibid., p. 87, pl. 9.
24 Ibid., p. 91, pl. 146.

from the same manuscript depicts the story of a loyal mongoose. In the upper portion of the painting, the composition shows the mongoose has already killed the cobra inside house near the child lying safe in cradle, and at bottom, at entrance of the house, the mongoose is shown beaten to death by his rash master who holds up a brick.[25] (plate 14)

Trapping of birds is a theme which has been repeatedly drawn by different artists in varying layout and setting in the different Manuscripts. A Manuscript of importance was illustrated again and again whenever it was so needed. Several copies of different manuscript have survived to this day. For instance the numerous copies of the *Akbarnama, Baburnama, Anwar-i-Suhali, Razmnama, Diwan-i-Hafiz* and *Ramayan* etc. are known to exist in the different art collections of the world. These contain many miniatures representing common themes, though they invariably differ in their art of representation. The individuality and skill of each artist does not fail to express itself in the treatment of objects. This is more clearly observed through comparison of duplicate reproductions of the same theme. Thirty six of such miniatures are known to us in the three copies of the *Baburnama*. One theme which is common to all that is the "bird trappers at work" is taken here to explain the above observation.

The one composition at the Fog Art Museum has also on this theme. This is the finest example of the bird trapping. In this painting the some fowlers, are depicted, engaged in catching the birds, and their methods and implements are also shown. (plate 15) In the miniature from Moscow MS of

25 Ibid., p. 94, pl. 1.159

the *Baburnama*, the foreground is entirely covered by a net with birds trapped in its holes. The four bird trappers engaged in the work are shown in an expectant mood on the left margin. The rest of the space is filled with rocks and sparsely situated trees. It is an intelligent composition is so far as the main object required to be shown dominates the whole scene while the complement Aries are kept in the background.[26] Another composition of bird catching is found in the National Museum *Baburnama* bearing the name of artist Bhag (f. 132). This is also the finest example of the bird catching. (plate 16) This is a very colourful composition and the foreground is entirely covered by a net and birds trapped in its holes. The trapper involved in the work is shown in exciting mood on the left margin. From the point of view of execution the latter is however very clearly superior.[27] The miniature of *Baburnama* in the British Museum (f. 190a) is finest example of bird trapping. (plate 17) The painter of this composition is Shyam. Here the composition is far more imaginative but includes too many complementary objects. A massive castle in the farthest corner balanced by a crooked elevation of a cliff and a black cluster of clouds overhanging the top margin, huge, dense trees overgrowing the varying levels of mounds, a stream in the foreground with ducks swimming and cranes composedly watching, shrubs stretching along the bank, a company of no less than ten attendants wainting at the trap and yet a pair of fox perched fearlessly on the rocks at the bottom-all are crammed up in the picture. Yet a good portion in the middle is left for the action. A cluster of birds is shown descending on net or already trapped

26 S.C. Welch, *Art of Mughal India: Painting and Precious Objects*, New York, 1963, pl. 9.
27 Randhawa, op.cit., pl.230

on the left. The artist has tried to be as vivid of as possible and has taken care to show all the implements used in bird catching. These include a thatch screen, a glud strick, a falcon and there are cages and baskets for keeping the trapped birds.[28] Babur himself writes for this incident that "along the Baran people take masses of cranes (*turna*) with the cord, masses of *auqar*, *qarqara*, and *qutan* also. This method of bird catching is unique. They twist a cord as long as arrow's flight, tie the arrow at one end and a bildurga at the other, and wind it up, from the arrow end, on a piece of wood, span-long and wrist thick, right upto the *bildurga*. They then pull out the piece of woods leaving just the hole it was in. The *bildurga* being held fast in the hand, the arrow is shot off towards the coming flock. If the cord twists round a neck or wing, it brings the bird down. On the Baran everyone, takes birds in this way."[29] The layout of the illustration contained in the Fog Art Museum is still different. Here a man is shown actually using the glue stick while the landscape is well balanced by a distant plan and thick trees, dividing it into three parts. All this apart, in accuracy of line drawing, creating of the atmosphere, depiction of details, colouring and specially in depicting the various postures excels all others. The human figures here are certainly more varied and characteristic.[30]

As compared to this the other paintings seem not only too simple but also a bit clumsy. The birds are shown mostly in profile. The treatment of trees is fine in all of them and yet a vide conceptual difference sets them apart from each other.[31]

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28 Sulaiman, op.cit., pl.27
29 *Baburnama*, op.cit., p.230
30 Welch, *Art of Mughal India*, op.cit., pl. 9.
31 Randhawa, op.cit., pl.29

Trapping of the wild elephants, lions, *cheetah*, blackbuck, deer, etc., is the other theme of a few illustrations depicting wild life. An Akbari miniature (Acc. No. 39/117) in the *Akbarnama*, Victoria and Albert Museum, London,is the finest example of the trapping of wild elephants, this double-page illustration presents both the preliminary combat, as well as the moments after the wild elephant has been captured and fastened to the trunk of a tree. In scale he is larger than the tree, his condition of being mast being conveyed by the way he greets his royal visitor. The great tusker raises his foot to paw the air, his ears flapping back, and the trunk curling up in anger.[32] (plate 18)

Another Akbari miniature from the same Manuscript(f. I.S.2/1896, V. A. Museum, London) depicts catching of *cheetah* by prince Salim near Allahabad. The prince kneels on the ground to the lift the blindfolded *cheetah* by the head, and the two assistants hold by its feet, so that it can be placed in a carrying fold prior to being caged, a servant attempts to wave flies away from the prince's head outside the specially prepared corral, men bring the cage and the bullock cart on which the cheetah is to be transported. The town of Allahabad is visible on the horizon.[33] (plate 19)

A miniature of the *Baburnama* (f. 270b, N.M., New Delhi) is a example of catching of black buck. In this painting the hunters are preparing for catching the animals, and they are hidden behind the tree.[34] It is the work of Ibrahim Kahar.

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32 Sen, op.cit., p. 84, pl. 29.
33 Folk, op.cit., p. 37, pl. 16.
34 Randhawa, op.cit., pl. 93.

The themes depicting the animal fights may be taken as a part of animals' representation and also a source of amusement. Generally, the lions, elephants, rhinoceros, deer, specially the black-buck, bullocks, rams and camels are trained for combat.

The rare representation of the combat between the lion and bullock drawn in the middle part of the painting in which again encircled by human figures keeping emperors, position aside. In this painting the emperor Akbar along with his companions is sitting and enjoying the fight on the suburb area of the town. The fighting spots, seems to be full of greenery and free from human habitation. In the lower part the yogis appear clearly too whom Akbar often visited. The three ascetics with their disciples, they are meditating in the company of goats. This picture can be assigned to Miskin, who often worked in this subdued palette of thin tans, opaque greens, and faint washes of other tints. His rocks challenge us to a game of visual hide and seek, if we look intently enough. We can find in them human and animal profiles that verge on caricature.[35]

Another miniature of the *Baburnama* (f. I.M. 275/1913, V.A. Museum London), depicts fights of elephants and camels. The celebration depicted here took place at Agra in 1528. Babur had defeated Ibrahim Lodi at the battle of Panipat in 1526. Relations from Persia and Transoxiana as well as envoys from the Persian Shah and the Uzbeg ruler were invited to attend. Here the guests are offering gifts to Babur. In the middle portion of this painting two camels are fighting in the presence of Babur and his companions, while in the

35 Welch, *Art of Mughal India*, op.cit., pl. 12.

upper portion of the painting two young elephants are fighting with each other, and *Mahawats* sitting on their respective elephants are directing their fights.[36] (plate 20)

The scene represented in *Baburnama* (f. 352a, B.M., London) may be taken as the best example of depicting the fight between an elephant and a rhinoceros.[37] Babur states that "I had often wondered how a rhino and an elephant would behave if brought face to face, this time one came out right in front of some elephants the *Mahawats* were bringing along, it did not face them when the *mahawats* drove them towards it, but got off in another direction".[38] In this painting Babur is keenly observing the behaviour of both elephant and the rhinoceros, when they are at fight. The fighting spot entirely encircled by the companions, well equipped with bows and arrows, spear and gun etc. The companions are standing on the ground along with some cavaliers. Babur himself sitting on the horseback is commutating with a foot soldier. The fighting spot is full of natural plantation and fauna. (plate 21)

Another miniature of the *Baburnama* (f. 492a, B. M., London) depicts a fight scene between the two ram and the deer. The fights of ram and deer are composed in a closed campus of a garden. The flat deep garden in the background has dominated the whole view and the group of four nobles shown in the distant corner remains isolated of the accident occurring in the centre. Only a few gestures of hands make the scene living. It seems that the painting has been composed in well maintained garden which is full of

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36 Pinder-Wilson, *Paintings from the Muslim Courts of India : British Museum*, Kent, 1976, p. 34, pl. 26.
37 Sulaiman, op.cit., pl.52
38 *Baburnama*, op.cit., p..380

greenery, colourful flowers, trees and plants. There is a clear depiction of two fights one between two rams and another between two black-bucks. In both the fighting rams clearly appear of the different species.[39] The other important thing is that all the fighting animals are male. Babur writes that "while the gifts were being brought and before food, fierce camels and fierce elephants were set to fight on an island opposite, so too a few rams, thereafter wrestlers grappled".[40] (plate 22)

Pictures of Birds and Animals

Apart from all these themes, the portrayal of birds and animals also had great importance during the time of Akbar and Jahangir. But Jahangir had paid great attention to the portrayal of flora and fauna. Emperor Jahangir's vivid and accurate descriptions of several birds and animals undoubtedly present him as a keen observer of nature and indicate his desire for realistic expression. Not satisfied with textual description, he ordered his painters to draw their line nesses from life. Jahangir considered pictorial representation a source of amazement and pleasure, and recognized the importance of the documentation of varieties of species of animal world to be passed on to later generations. Consequently, numerous studies of birds and animals characterized by realism were made at his instance by his painters. It was thus, that with Jahangir a new era in the portrayal of flora and fauna emerged and developed.[41]

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39 Sulaiman, op.cit., pl.39.
40 *Baburnama*, op.cit., p.298.
41 S.P. Verma, *Flora and Fauna of Mughal Art*. Marg, Bombay, 1999, p.270.

The *Baburnama* and *Ajaib-al-Makhluqat* illustrated towards the close of the sixteenth century are significant since these represent a rich variety of flora and fauna of India. Their illustrations may be accepted as trend setter in the course of the development of independent studies of birds and animals at Jahangir's studio. These pictures of birds and animals are examples of vivid and minutely detailed realistic art. The famous painter *Ustad* Mansur, *"Nadir-ul Asr"* ('Unique of the Age'), of Jahangir's studio had an early stint at Akbar's court, and his artistic contributions are available in the *Baburnama* (c.1590-1600) Manuscript.

The illustrations of the *Baburnama* provide a very rich variety of flora and fauna, e.g., birds, animals, equatic animals, trees, flowers and plants. And these are painted in a very realistic and naturalistic form. A miniature of the *Baburnama* (f. 378a) depicts a portrait of lively elephant life. It shows elephants wandering here and there in herd.[42] The elephants are looking very lifelike. At the upper side of the painting a molly hill and a big tree have been depicted. While in the lower portion an identifiable bird is sitting on a small tree. Babur writes, "The elephant is known as *hathi* in Hindustan. It inhabit in the (western?) borders of Kalpi country."[43] (plate 23) A portrait of a wild Indian buffalo (f. 380a) is passing through a meadow. It is drawn in a very naturalistic form.[44] On the upper portion there is tree. While in the lower portion the two waterfowls are fluttering in the water. The important thing there is a stylized tree is that the buffalo is looking very strong, healthy and big in size. Its long horns and tail are very prominent. Babur writes, "The wild

42 Sulaiman, op.cit., pl. 55
43 *Baburnama*, op.cit., p. 488
44 Sulaiman, op.cit., pl. 57

buffalo is much larger than the (domestic) buffalo and its horns do not turn back in the same way. It is a mightily destructive and ferocious animal."[45] (plate 24) Another illustration of *Kalaharan* and Zebu Chini (f. 282a) depicts different species of deer and cow.[46] In the upper portion there are deer and black bucks, both male and female in different postures are depicted. In the lower portion there is a grassland the cows, both male and female, appear in different postures. Babur writes that, "There is a deer (*kiyik*) after the male deer there is a black buck originally called *Kalaharan* in Hindustan. The gini cow, a very small one, perhaps as large as the quchqar (ram) of those countries (Tramontana). It flesh is very tender and savory.[47] (plate 25) A separate miniature (f. 383b) depicts a peacock, with peahen in a rocky landscape gulping a snake. This particular folio also contains a picture of two squirrels (*galahari*) in its upper part. These are depicted in their natural surroundings in a playful mood. The trees shown in the foreground is naturalistic and identifiable.[48] Babur writes that, "The peacock is one of the birds of Hindustan. It is a beautifully coloured and splendid, animal. Its form is not equal to its colouring and beauty. A mouse people call *galahri* (Squirrel) is another. It is just always in trees, running up and down with amazing alertness and speed.[49] (plate 26) Another illustration from the same manuscript (f. 354b) depicts a number of parrots perched on a huge mulberry tree. The parrots appear, as if they are communicating with each other. The whole body of the parrots is green and the beak is red.[50] Babur writes, that

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45 *Baburnama*, op.cit., vol. II, p. 90
46 Sulaiman, op.cit., pl. 59
47 *Baburnama*, op.cit., vol. II, p. 91
48 Sulaiman, op.cit., pl. 60
49 *Baburnama*, op.cit. vol. II, p. 493
50 Sulaiman, op.cit., pl. 61

"The parrot (*tuti*) is another, they are found in Bajaur, sawad and its neighbourhood. The parrots is it comes into Ninguahar and Lamghanat in the heats when mulberries ripen, it is not there at other times. It is of many kinds. People says that they speak, words, and in Bajaur so much so that 5 or 6000 fly in one flock (Khail)".[51] A miniature (f. 385b) depicts a seen full of natural beauty like trees, grass, mounds of earth etc., while in the upper part there is a big tree on which the bird *sharaks* are sitting in natural style. In the lower portion two of them are sitting on a tree probably *pipal*. The colour of the bird is brown and their beaks and feet are yellow in colour.[52] Babur writes, "The *sharak* is another. It is numerous in the Lamghanat and abides lower down, all over Hindustan. Like the parrot, it is of many kinds. The kind that is numerous in the Lamghanat has a black head, its primaries (*qanat*) are spotted, its body rather larger and thicker than that of the *chughurchuq*. People teach it to speak words.[53]Another miniature of *Baburnama* (f. 1.216, C.B. Library, Dublin) depicts an egret with beige back and white underside approaches. Covered pond in a grassy landscape in upper part and in lower part two white storks with their neck pouches extended approach a tangle of tale plants in a grassy landscape.[54] (plate 27)

Another miniature of *Baburnama* (f. 1.218 C.B.Library, Dublin) depicts a *saras* crane with neck arched walks toward a rock in the foreground of a gentle, grassy landscape.[55] In this painting, a *saras* crane stalking with one leg raised, beak open, and neck bent in a characteristic pose, is one of the

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51 *Baburnama*, op.cit., vol. II, pp. 493-94
52 Sulaiman, op.cit., pl. 62
53 *Baburnama*, op.cit., vol. II, p. 495
54 Leach, op.cit., p. 120, pl. 13.
55 Ibid., pl. 21

most sensitive studies in this manuscript. It is a great deal more naturalistic than the conventionalized rendering of this familiar bird in the British Library *Baburnama* (f. 390a). Babur writes, "Hindustanis call it *tiwa-turna* (Camel crane). It may be smaller than the ding but its neck is rather longer. Its head is quite red people keep this bird at their houses; it becomes very tame.[56]

Another miniature of the *Baburnama* (f. 390b, B.M., London) depicts a pair of *manik* (crane) standing near the lotus covered pond in a grassy landscape in the upper part of the painting. In the lower part two white storks with their neck pouches extended, approach a tangle of tall plants in a grassy landscape. The very colourful flower plants are also depicted in this painting.[57] Babur writes that the *manik* in stature approaches the *saras*, but its bulk is less. It resembles the lag-lag (Ciconia alba, the white story) but is much larger, its bill is large and is black. Its head is iridescent, its neck white, its wings partly coloured, the tips and border feathers and under parts of the wings are white, their middle black. The stork has a white neck and all other parts black. It goes to those countries (Tramontona). It is rather smaller than the *lag-lag* (Ciconia alba).[58] (plate 28) Another miniature of *Baburnama* (f. 387b, B.M., London) depicts a pair of *Kanjal* which are standing on a hilly rocky landscape near the pond in which fishes are fluttering. An identifiable big tree is also depicted near them in the upper part of the painting,.[59] In the lower part two phulpaikar with a pale red breast is shown in hilly landscape beside a flower plant. In foreground a big tree is also shown. The phulpaikar

56 *Baburnama*, op.cit., p. 490
57 Sulaiman, op.cit., pl. 67
58 *Baburnama*, op.cit., vol. II, p. 494
59 Sulaiman, op.cit., pl. 67

which are shown it seems that most probably one is male and another is female. Babur writes," The *Kanjal* its bulk may be that of the one already described. There is little difference in colour between the cocks and hen. It is found in Parashawar, Hashnagar and countries lower down, but not higher up. The phulpaikar, its size may be that of the *Kabg-i-dari*, its shape is that of the house cock, its colour that of the hen. From forehead (*tumagh*) to throat it is of a beautiful colour, quite red. It is in the Hindustan mountains".[60]

Another miniature of the *Baburnama* (f. 394a, B.M., London) divided into two parts; in the upper part a very horrible animal named *Siysar* depicted which is flottering in the wavy sea. It is looks very colourful and its nail are very sharp and tail is too long. And in the lower part a sea pig is also depicted into the wavy water looking for a fish. Its shape is very different. Both the aquatic animals are looking very real in shape and colour.[61] Babur writes, the *Siysar* is like a lizard and it found in all rivers of Hindustan. One that was taken and brought in was about 4-5 *qari* (cir 13 feet) long and as thick perhaps in was about said to grow still larger. It sout is over half a yard long. It has rows of small teeth in its upper and lower jaws. The water hog (sea pig, Plantanista gangetica, the porpoise) is in all Hindustan rivers. It comes up suddenly out of the water, its head appears and disappears, it dives again and stays below, chewing its tail."[62] (Plate 29)

Another miniature of the *Baburnama* (f. 394b, B.M., London) depicts a *gharial* (the crocodile) flottering in the wavy sea. It is also looking very real

60 *Baburnama*, op.cit., p. 495
61 Sulaiman, op.cit., pl. 72
62 *Baburnama*, op.cit., p. 502

in shape and colour.[63] Babur writes, "The *gharial* (Gavialus gangeticus is said to grow large, many in the army saw it is in the *Saru* (*Gogra*) river. It is said to take people, while we were on that river's (934-935 A.H.) it took one or two slave-women (daduk), and it took three or four camp followers between Ghazipur and Banaras. In that neighbourhood I saw one but from a distance only and not quite clearly".[64]

Another miniature of the *Baburnama* (f. 1.223, C.B. Library, Dublin) depicts a two horned fish *Kakka* face in opposite directions in a wavy sea. The horned fish (*Kalah*) is described by Babur as having bones about three inches long that protrude from its head, which are shaken to make a disturbing sound apparently intended to frighten predators when the fish is caught. Beveridge mistakenly thought that Babur might be referring to some kind of prawn, but the Beatty miniature clearly depicts a fish.[65]

In another case a miniature of the *Baburnama* (f. 1.224, C.B. Library, Dublin) depicts six frogs with protruding eyes sit on water; one clutches the rock of a shoreline. They are looking very natural and very colourful. Babur comments that though the Indian frog is similar to those he already knows, it differs in being able to move about six or seven yards on the water surface.[66] (plate 30)

The miniature of the *Baburnama* (f. 398a, B.M., London) depicts a *Kirni* tree which looks very fruitful tree in rocky landscape. In the foreground a temple is also depicted. Babur observes, "The mimusops, (Sans. Khirni,

63 Sulaiman, op.cit., pl. 73
64 *Baburnama*, op.cit., vol. II, p. 502
65 Leach, op.cit., p. 129, pl;. 1.223.
66 Ibid., p. 129, pl. 1.224.

Mimusops Kauki) though not very large, is not small the fruit is yellow and thinner than the red jujube. It has just the grape's flavour, but a rather bad aftertaste, it is not bad, however, and is eatable. The husk of its stone is thin."[67]

Another miniature of the *Baburnama* (f. 286, N.M., Delhi) depicts a *Chirunji* tree in the upper part of the painting. It is standing in the hilly rocky landscape and in the lower part of the painting a date tree is shown which is looking very real. And the fruit is also shown. In the foreground a different varieties of flowers is also depicted.[68] Babur writes, "The *Chirunji* (Buchanania latiafalia), this tree had been understood to grow in the hills, but I knew later about, because there were three or four clumps of it in our gardens. It is much like the *mahua*. Its kernel is not bad, a thing between the walnut and the almond, not bad rather smaller than the pistachio and round, people put it in custards and sweetmeats. The date-palm (P. Khurma, Phochix dactylifera) is not peculiar to Hindustan, but is here described because it is not in those countriews (Tramontana). It grows in Lamghan also. Its, branches (i.e. leaves) grow from just one place as its top, its leaves (i.e. leaflets) grow on both sides of the branches (midribs) from neck (buin) to tip, its trunk is rough and ill coloured, its fruit is like a bunch of grapes, but much larger."[69] (plate 31)

Another miniature of the *Baburnama* (f. 287b, N.M., New Delhi) depicts an orange tree with much of fruits. It is standing near the running

67 Sulaiman, op.cit., pl. 76
68 Randhawa, op.cit., pl. 32
69 *Baburnama*, op.cit. vol. II, p. 508

water and in the foreground the hilly landscape is depicted.[70] Babur writes, "The orange (tyr. Narunj, Citrus aurantium) and orange like fruits are others of Hindustan. Oranges grow well in the Lamghanat, Bajaur and Sawad. The Lamghanat one is Smallish, has a naval, is very agreeable, fragile and juicy. It is not at all like the organge of Khurasan and those parts, being so fragile that many spoil before reaching Kabul from Lamghanat which may be 13-14 (65-70 miles), while the Astrabad orange, by reason of its thick skin and scant juice, carries with less damage from there to samarkand, some 270-280 Yighach."[71]

A miniature of the *Baburnama* (f. 404a, B.M., London) depicts a lemon tree in upper part of the painting. It is standing in hilly rocky landscape. And in the lower part of the painting a citrus tree is shown. It is full of ripen fruits. These trees are identifiable.[72] Babur writes, "The lemon (H.Karna, C. limonum) fruit resembling the orange (*naranj*), it may be as large as the gal-gal and is also acid. The amal-bid is another fruit resembling the orange. It is as acid, perhaps, as the citron and lemon (turunj and lime)".[73]

Another miniature of the *Baburnama* (f. 282b, N.M., New Delhi) depicts a mango tree is represented standing in a hilly rocky landscape. Here in the lower part of the painting a fox is also depicted.[74] Babur writes, "The mango (P.*ambah*, Magnifera Indica) is one of the fruits peculiar to Hindustan. Hindustan is pronounce the b in its name as though no vowel followed it, this being awkward to utter, some people call the fruit (P.) *haghzak* Mangoes

70 Randhawa, op.cit., pl. 35
71 *Baburnama*, op.cit., p. 510
72 Sulaiman, op.cit., pl. 82
73 *Baburnama*, op.cit., p. 512
74 Randhawa, op.cit., pl. 115

when good, are very good, but many as are eaten, few are first rate. They are usually plucked unripe and ripened I the house. Unripe, they make excellent condiments (*qatiq*) are good also preserved in syrup. Taking it altogether, the mango is the best fruit of Hindustan."[75]

Yet, another miniature of the *Baburnama* (f.283a, N.M., New Delhi) depicts a banana tree bearing fruits.[76] In the foreground, a rocky landscape is rendered characteristically. And in the lower part of the painting, ducks and a peahen are shown. Babur writes, "The plantain (Sans.*kela*, Musa Sapientum) in Arab called *Mauz*. Its tree is not very tall, indeed is not to be called a tree, since it is something between a grass and a tree., Its leaf is a little like that of the *aman-gara* but grows about 2 yards (*qari*) long and nearly one broad, out of the middle of its leaves rises, heart-like, a bud which resembles a sheep's heart. As each leaf (petal) of this bud expands, there grow at its base a row of 6 or 7 flowers which become the plantains".[77]

Another miniature of the *Baburnama* (f.287a, N.M., New Delhi) depicts a fruit bearing tree of coconut. It is shown standing near a hilly rocky landscape.[78] Babur writes, "The coconut palm (P. nargil, cocos nucifera), the Arabs give it Arabic form and sags *narjil*, Hindustanis called it haler, seemingly by people popular error. Its fruit is the Hindi nut from which black spoons (*qura qa shuq*) are made and the larger ones of which serve for guitar bodies. The coco palm has general resemblance to the date palm, but has more, and more glistening leaves. Like the walnut the coconut has a green

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75 *Baburnama*, op.cit., p. 503
76 Randhawa, op.cit., pl.116
77 *Baburnama*, op.cit., vol.II, p.504
78 Randhawa, op.cit., pl.41

outer husk, but its husk is of fibre on fibre. All ropes for ships and boats and also cord for sewing boat seems are heard of as made from these husks".[79]

A miniature of the *Baburnama* (f.406b, B.M, .London) depicts a Jason flower plant. It is depicted very beautifully. The flower colour is maroon which pinkish shade. The whole scene is very pleasant.[80] Babur writes, "In Hindustan there is a great variety of flowers, one is the *jasun* (Hibiscus rosa Sionensis), which some Hindstanis call (Hindi) *gazhal*. It is not a grass (*giyah*), its tree (is in stem and like the bush of the red rose), it is rather taller than the bush of the red rose. The flower of the *jasun* is fuller in colour than that of the pomegranate and may be of the size of the red rose, but the red-rose when its bud had grown, opens simply, whereas when the *jasun*-bud opens, a stem on which other petals grow, is seen like a heart amongst its petals".[81] (plate 32)

Corresponding to it, a miniature of the *Baburnama* (f.407b, B.M., London) depicts a *Kenner* flower plant in the upper part of the painting.[82] The beautiful red flower is shown. In the lower part of the painting a *Kiura* flower plant is depicted. It is looking very beautiful. In the foreground the grass land is shown beautifully. The whole scene is very beautiful. Babur writes, "the *Kanner* (Nerium adorum, the oleander) grows both red and white like the Peach flower, it is five petalled. It is like the peach-bloom, but opens 14 or 15 flowers from one place. so that seen from a distance, they look like one great flower. The oleander-bush is taller than the rose bush. The red oleander has a

79 *Baburnama*, op.cit., p.505
80 Sulaiman, op.cit., pl.85
81 *Baburnama*, op.cit., p.513
82 Sulaiman, op.cit., p.86

sort of scent, faint and agreeable. The *Kiura* (Pandanus odoratissimus, the screw pine) has a very agreeable perfume. Most has the effect of being dry, this may be called moist musk a very agreeable perfume. The tree's singular appearance notwithstanding, it has flowers perhaps 1 ½ to *garish* (13 1/2 to 18 inches) long. It has long leaves having the character of the reed *gharau* and having spines.[83]

Falcon :

Jahangir was very fond of falcons. He wrote about a falcon which came directly from Persia, "What can I write of the beauty and colour of this falcon? There were many beautiful black markings on each wing, and back-sides. As it was something out of the common, I ordered *Ustad* Mansur, to paint and preserve its likeness".[84] In consequence of this liking for falcons many drawings of this bird belonging to the Jahangir's period are to be found in various collections. A signed example of its likeness by Mansur,[85] is known in the Prince of Wales Museum, Mumbai. Yet another beautiful falcon study is in the Museum of Fine Arts, Boston. A.K. Coomaraswamy mentions a miniature, "Falcon", ascribed to Mansur, lodged in the Museum of Fine Arts, Boston (f.14.683), which could be the most probable likeness of the bird referred to by Jahangir.[86] It represents the bird on its perch, in rigid profile and centrally positioned in the composition. It is the picture of swift, relentness killer whose handsome shape in the most delicate colours, is not

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83 *Baburnama*, op.cit., p.514

84 *Tuzuk*, op.cit., vol.II, p.108, For reproduction, see S.P. Verma, *Painting the Mughal Experience*, New Delhi, 2005, p. 91, pl. 12. For reproduction see, Shanti Swarup, *Flora and Fauna in Mughal Art*, Bombay, 1983, pl. 80.

85 Verma, op.cit., pl. 1.

86 A.K. Coomaraswamy, *Catelogue of Indian Collections in the Museum of Fine Arts*, Boston, pt. VI (Mughal Painting), Boston, 1930, p. 51, pl. 41.

able to hide the cruel nature of the bird. Its hard penetrating eyes seem to look through its intended victim. The well defined form of the bird and the remarkable precision of inner details, including the ferocity in the eye and the sharpness of the preying beak, testify to the artists keen perception. The plain background in contrast to the slow careful work on the figure, as in other bird and animal studies, not only throws the figure in relief to the fore, but would be suitably functional in any bird objective, picture of nature. (plate 33)

Black Buck :

A painting of black buck (c.1615-20) is probably by Manohar depicts, glowing sleek, with deftly modulated white, black, and tan coat, this black buck stands a part from Mansur's and Abul Hasan's animal studies as a calculated "work of art" rather than a knowing portrayal of a specific creature.[87] The buck's stylized mask with its crisply rounded eye and firmly set mouth brings to mind the patterned abstraction of Archamenid relief sculpture. Despite this glyptic precision forms are not sharply observed. Beneath the fur, the skull and jaw seem vogue and soft, and the nostrils are ill defined, horns spring illogically from nowhere into amorphous, textureless stubs.[88]

A more finished but strikingly similar miniature in the Victoria and Albert Museum, showing a groom leading a black buck was probably painted by the same hand convincingly inscribed as the work of Manohar are in the *Muraqqa*-i-*Gulshan*, Gulistan Library, Teheran.[89] (plate 34)

87 Welch, *The Emperor's Album*, op.cit., p. 185, pl. 50.
88 Ibid., p. 185, pl. 50.
89 Ibid., p. 185, pl. 50.

Spotted Forktail:

Abu'l Hasan honoured with the lofty title *Nadir uz-Zaman* ('Wonder of the Age') has produced an attractive bird in a landscape.[90] An inscription indicates that the bird was admired by Jahangir at Jangespur, and Abu'l Hasan may well have executed the painting on the demand of Jahangir. The slightly stiff drawing of the bird in rigid profile dominates the whole composition.[91] This spotted forktail (Enicurns maculates), outfitted in starkly elegant blacks and whites, is as dignified as any emperor. Its white outlined oval eye, precise as a crescent moon, peers alertly from the brow's airg, ping pong ball roundness. Abu'l Hasan, a contemporary of Mansur, puts masterly touches to this picture, high lightening live ness, humor, and agility of expression.[92] The soft, soothing quality of the pigment, the chiaroscuro emerging through the clouds, this is one of Abu'l Hasan's few natural history pictures, and the only one with a contemporaneous inscription. (plate 35)

Nilgai (Blue bull) :

Many of Mansur's painting of birds and animals still exist today, and his work is well known to specialists in Mughal art. The most highly esteemed paintings include the *nilgai* from the Kevorkian album painted around 1620.[93] Jahangir's interest in natural history was surpassed only by his passion for hunting. The large and noble *nilgai* (Boselaphus trago-camelus),

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90 Amina Okada, *Imperial Mughal Painters:Indian Miniatures From 16th to17th,centuries* , Paris, 1992, p.174,pl. 210.

91 Ibid., pl. 210, Verma, *Flora and Fauna in Mughal Art*, op.cit., p. 5, pl. 5.

92 Verma, op.cit., p. 5, pl. 5.

93 Okada, op.cit., p. 222, pl. 259.

or blue blue, was a favorite prey. An act revealing the least admirable side of Jahangir's character is recorded in his memoirs. Jahangir mentioned that "this time again I saw that *nilgai* in the hunting-ground (*Shikargah*), and the watchman recognized that in the two previous years he had gone away wounded. In short, I fired at him again three times on that day. It was in vain. I pursued him rapidly on foot for three Kos, but however much I exerted myself I could not catch him".[94]

This unusually graceful *nilgai* probably roamed in Jahangir's zoological garden. As painted by Mansur, its sensitively observed fur, cartilaginous ears, velvety muzzle and smooth horns invite stroking.[95] So precise was the artists observation – down off at the tip -that one can imagine the animal from every angle. But scientific accuracy was not Mansur's sole concern: artful silhouetting against a dusty pink ground enhances the blueness of the fur, amplifies the animal's noble presence, and lends lyricism to a memorable image. (plate 36)

Turkey Cock :

The Turkey cock (Meleagris Gallipavo), a native of Mexico, was introduced into Europe about 1600, and from thence into Asia. The Turkey cock and Himalayan Cheer pheasant were presented to Jahangir in 1612.[96] The Emperor Jahangir records in his memoirs that one of his chief retainers, Muqarrab Khan, brought from the port of Goa, in 1612, 'certain rarities', including 'some animals that were very strange and wonderful'. He adds, "I

94 *Tuzuk*, op.cit., p.230
95 Welch, op.cit., p. 178, pl. 47.
96 *Tuzuk*, op.cit., vol. II, pp. 305-06.

both described them and ordered that painters should draw them in the *Jahangirnama*...one of these animals (a turkey cock) in body is larger than a peahen and smaller than a peacock; then fallows a quaintly worded description of the appearance and actions of this 'Chameleon – like bird'. Jahangir's impassioned naturalistic description of these is worthwhile, to evaluate by comparison their immaculate reproduction in drawing and colour by Mansur.[97]

The exquisite painting of the Turkey cock by Mansur is a masterly rendering of a strange creature, valued for its novelty by the whole court-Mansur's *kalam* has been called naturalistic. Actually, this painter is not a portrait maker but an interpreter. The Turkey Cock has become, in his hand, almost a peacock by the exaggeration, of tail, the fine workmanship on the feathers and the heightening of the stance.[98] (plate 37)

Himalayan Cheer Pheasant :

The Cheer Pheasant(Catreus Wallichi) in found in the outer Himalayas, from Katmandu, Nepal, of Chamba, Punjab, at an elevation ranging from 4,000 to 10,000 feet. The Emperor Jahangir records in his memoirs, in 1621, "Basoi, the Zamindar of Talwara (in Bari Doab, Punjab) brought me a bird which the hill people call *janbahan*. Its tail resembles the tail of the *qirqawul* (pheasant), which is also called the *tadru* and its colour is exactly like that of the hen- pheasant. The circle round the eyes of this bird is red, while the orbit

97 Ibid., vol.II. p.216.
98 Mulk Raj Anand, *Album of Indian Painting*, Delhi, 1973, p. 104.

of the pheasant is white... Basoi stated that it lived in the snow-mountains, and that its food was grass and other stuff".[99]

A number of drawings based on earlier works of Mansur, Inayat, Abu'l Hasan etc., were also prepared by the painters of the Shah Jahan atelier. The study of the Himalayan pheasant closely resembles the painting of the same subject in the Wantage Album in the Victoria and Albert Museum and its counterpart in the Maharaja Sawai Man Singh II Museum, Jaipur. It shows some details landscape and orchid flowering on the right, which are not found in the signed Mansur drawing in London. There is yet another version of this study where the pheasant is represented in the same posture but in reverse, published by F.R. Martin in 1912, whose present where- about is set known.[100]

In *Tuzuk*, Jahangir writes that he ordered to keep some male and female in one place, and by degrees they bred. He ordered them to place the egg under hands, and is a space of two years sixty or seventy young were produced and fifty or sixty grew up. (plate 38)

Zebra :

A study of the animal paintings by Mansur, will leave no one in doubt that the *Ustad* Mansur was as successful in portraying animals as he was in the case of birds. One such painting is that of Zebra [101](f. I.M. 32-1925) from the Victoria and Albert Museum, London. Jahangir had never seen this animal before. In his Memoirs he describes it thus: "From the tip of the nose to the

99 *Tuzuk*, op.cit.,vol.I. p.216.
100 Das, op.cit., p. 50, pl. 50.
101 Swarup, op.cit., p. 60, pl. 99.

end of the tail, and from the point of the ear to the top of the hoof, black markings, large or small, suitable to their position, were seen on it. Round the eyes there was an exceedingly fine black line. One might say the painter of fate with a strange brush, had left it on the page of the world".[102] (plate 39)

Chameleon :

It would be hard to find any other animal study by Mansur more skillfully done than that of the Chameleon. This miniature is in the Royal Library collection at Windsor Castle, U.K. (f. RL.12081).

Mansur's typical enlargement of the figure in proportion to the space and branches of the tree, and highlighting of details of the main figure to isolate it from the already suppressed background is a special dignity to his object of painting. This is a part, the naturalistic treatment of the tree's structure, with all the details of knots and bulges, and leaves displaying midribs with parallel venation, is thoroughly maintained. The authenticity of the relationship between the Chameleon and its environment is projected in a non-conventional manner by somewhat distorting the proportions. The big figure is delicately balanced on a thin twiggy which is only a section of a big tree.[103]

The *Markhur* or Himalayan wild goat :

Markhur (snake-eater) is the *Pushtu* (Afghan) name of a large species of Himalayan wild goat (Capra Falconeri), with spirally twisted horns and

102 Ibid., p. 60, pl. 99.
103 S.P. Verma, Mughal Painters of Flora and Fauna, Ustad Mansur, New Delhi, 1999, p. 115, pl. X.

long shaggy coat; found chiefly in the Pir Panjal range, Kashmir.[104] Jahangir records in his memoirs the same Afghans (Stuvari tribesmen) killed and brought a *markhur*, the like of which I had never seen or imagined. I ordered my artists to plaint him. He weighed four Hindustani mounds, the length of his horns was 1 ½ *gaz* less. This painting is attributed to Inayat and painted in 1607 during the reign of Jahangir.[105] (plate 40)

A pair of Indian Saras :

The memoir of Jahangir contain several important references to these birds (Ardea antigone) including the following entry made in 1618, "The saras is a creature of the crane genus....people keep them in their houses and they become familiar with men. In fact, there was a pair of *Saras* in my establishment to which I had given the name Laila and Majnun. This is attributed to Mansur in the early 17th century".[106]

The Indian Red Wattled Lapwing: This painting, signed, 'work of the slave of the presence chamber,' probably portrays one of several birds described by Jahangir in his Memoirs and of which he wrote, "I ordered *Nadir-ul-Asr Ustad* Mansur to draw its likeness". The Indian variety of lapwing here depicted is the sarcogrammus Indias of the Zoologist.[107]

Red-headed vultures and Long billed Vulture :

This portrait is ascribed to Mansur (1615-20). In a fire and Brimstone palette of blacks, grays, and Turkey wattle red, Mansur arranged two

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104 C.StanleyClarke, *Mughal Painters, the School of Jahangir*, New Delhi, 1983,pl.13.
105 *Tuzuk*, op.cit., p.310
106 Clarke, op.cit.,pl.14.
107 Ibid.,No.21,pl.14.

incongruously elegant scavengers, headed vulture (Aegypius Ealvus) and a long billed vulture (Gyps Indian) for the fullest aesthetic and dramatic effect. While contemplating and sketching, he noted beauty in their ugliness and understood their wise patience. Hungry-eyed they stare like cats at goldfish, spellbound by something perhaps enticing carrion arranged by the artist. A few streaks of white and tan rocks for perching, sprigs of foliage, and spare brushstrokes of him *qalam* (washes of earth pigments, now slightly darkened by oxidization) provide a convincingly natural stage for the macabre pair.

There is a 19th century picture of the red-headed vulture in Kevorkian Album. That it is an early nineteenth century copy, cannot be doubted when compared to this 17th century painting.[108]

Great Hornbill :

The appearance of this great hornbill (Buceros bicornis), measuring about fifty two inches long, with black and white plumage and yellow casque and bill, is striking enough to have attracted the attention of Jahangir perhaps, on the other hand, it was the sound of the bird that was at first riveting, as in flight the wind whistling through its features makes a droning noise that can be heard a mile away. When congregating in groups in the larger trees of the forest, it also emits a noisy barrage of bizarre sounds. If Jahangir watched the hornbill feeding, he must have been amused at the way it tossed fruit or other food into the air with the tip of its bill, catching it in the throat and swallowing.

108 Welch, *The Emperor's Album*, op.cit., p.175, pl. 45.

While the bird is exquisitely painted, its position at the edge of the rock is somewhat awkward and its feet less suited to this perch than to the large branches of the trees of its forest habitat.

The painting of the hornbill is as splendid as that of the fork tail and would have faced it in the album to which they originally belonged.[109] (plate 41)

Tulip :

Although Jahangir mentions, more than a hundred flower paintings of Mansur, only four are extent. Nevertheless, whatever little is known from Mansur's brush could possibly form an album of rare botanical drawings of exquisite. His extraordinary achievement in floral painting is an evidence in the study of the tulip. The accuracy of its detail in the lifelike representation can be seen under a magnifying glass, such as the bends of the stems, the drawing of the leaves, the stages of flowering (from bud to full blossom), shown from different angles, a close up of the pollen grains at the ends of the stamens (six in number), and the delicate venation (in a few leaves), proceeding towards the margin of the leaf blade in a more or less parallel direction (convergent type) – a characteristic of lanceolate leaves of the plants of the lily family (liliaceae). It would seem that the species chosen by Mansur is Tulipa Clusiana.[110] (plate 42)

The other manuscript illustration is *Ajaib-al-Makhluqat*, which is containing six pages illustrations of the period of Akbar, to a work on natural history. *Ajaib-al-Makhluqat* contains a number of paintings of creatures and

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109. Ibid., p. 165, pl. 41.
110. Verma, *Flora and Fauna in Mughal Art*, op. cit., p. 110, pl. 4

other natural living beings. One of the paintings sketched by Kanha and painted by Mani, which is mainly divided into two parts, presents a beautiful depiction of nature. The upper portion contain mainly a crane in standing position, naturally seems to be ready for prey (or is about to catch a fish) (f.46). Similarly there are natural plantation, a beautiful pond in which the lotus and the fish can be seen. The portion of the land is naturally looks in ups and downs position. The two trees, one is naturally green and side by side another tree is completely dry.

The lower portion of the painting contains the two domiciles Cranes which are large in size. The colour of both these cranes is white and comprising black shades. The legs and peaks are big and yellow in colour. Probably one of them is male and another is female. Both are standing near the green plants. In foreground there is also a big tree. The depiction of painting is clear and beautiful.[111] (plate 43) The other painting depicted by Kanha and Mani is a clear depiction of two pairs of bustards and of partridges. Again the painting is divided into two portions. In the upper portion the two bustards are shown in a ground. Both these are black and white in colour. The whole painting is also black and white. One of the bustard is stretching its feathers. It seems that one is male and another is female. The sights of the ground look beautiful because of the plants. The sky is depicted well but not clear.

The lower portion of the painting is a depiction of two partridges. Both of them are different in shape, size, colour and style etc., The first one is black

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111. Thomas W. Arnold and J.V.S. Wilkinson, *Indian Miniatures: The Library of A. Chester Beatty*, Reprint, New Delhi, 1936, p. 50, pl. 6.

and white, small in size. Its neck and chest is black having white spots. While the remaining portion mainly feathers and legs are completely white. Another partridge is large in size. Somehow different in colour mainly white with black sheds. It seems that both these partridge are of different species. The ground is full of plants grass and a beautiful flower plant can also be seen. It seems the lily flower which is common even today.[112]

Another painting is a depiction of two big fishes, sketched by Miskina and painted by Bhurah. The painting shows that fishes are flottering in the sea. Both the fishes are in opposite directions. The interesting thing about this painting is that both these fishes have long ears which are sharp, big and sometimes look alike horns. The mouth of both these fishes are open, teeth can also be seen clearly. The sea is depicted very clearly, full of waves. Both the fishes seem from the same species because there seems no difference between them.

Another painting which is sketched by Miskin and painted by Bhurah depicts a group of six frogs of different-different species. They are sitting near a big tree which has two branches. It seems that these frogs are interacting with each other in their own language as happens during the rainy season. Two of these seem jumping on the muddy portion of the ground. The big tree which seems has about to touch the sky. The leaves are like beetle leaves. Under the tree the grass can also be seen clearly.[113]

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112 Ibid., p. 51, pl. 6(a).
113 Ibid. p. 51, 52, pl. 6(b).

Margin Painting

Border on margin painting (*Hashiya*) was introduced in order to enhance the beauty and elegance of the central picure, Margin painting, developed in last quarter of the 16th century at the Mughal school, became almost an integral part of the one page miniatures or album pictures, commonly in vogue at the beginning of the 17th century. Brown has rightly remarked that margin painting was so deeply associated with the art of painting during the17th century that no miniature was considered complete unless it was surrounded by a highly ornamented border.[114]

Margin painting is primarily associated with the art of manuscript illumination. Margins were decorated in gold with different forms of natural and mythical animals in fighting and hunting poses and coloured birds in the foliage. Illustrated margins appeared to differ in purpose from the book illustrations and album paintings. They seem to be decorative in nature.

During Jahangir's reign the *hashiya* art or margin painting developed quite independently and managed to reach the highest point of perfection. The borders with superb gold work in decorative designs exhibit flowering plants, fighting and hunting animals and imaginary rocky landscape along with trees and bushes were so elegantly adjusted that they faded the central pictures they enclosed. The paintings and portraits were also embellished with double borders, one inner border with calligraphic specimens arranged in cartouches

114 Percy Brown, *Indian Painting under the Mughals*, A.D. 1550 to A.D. 1750, New Delhi, 1981, p. 91.

around it and the other outer border with naturalistic floral compositions and sometimes third border was also adjusted.[115]

The finest example of the margin painting is the portrait of Sundar Das, Raja Bikramjit (No. 55.121. 10.r, MMA, New York) in which the border scheme is flowering plants in colour on a buff ground for the portraits and flowering plants in gold on a blue ground for the calligraphy. The painter of this folio drew all plants very thin stems varying colour from pale green to dark brown-green to red. The plants were delicately outlined in gold and when gold was used for leaf reins, it was done with such subtlety as to seem a mere suggestion. The leaves also share in a variety of green shades while the flower colors lean to purple and mauves. For all the impression of naturalism, the plants in the border do not on the whole lend themselves to identification with the exception of an iris in the lower right corner, possibly a snow drop at the left edge of the outer margin second row from the bottom, with a Hypoxis above it on the right. Within the portrait area the poppy before the feet and the iris behind are very clear and accurate.[116]

The other example of the margin is a calligraphic sketch of Persian poetry. This comprises of beautiful borders completely decorated with various flower, plants, birds and animals. The gold on blue inner border of this verso calligraphy page is almost identical to that of the recto (f. 15r). Panels of cat out poetry along the sides form a partial innermost border. The outer border contains flowering plants on a buff ground. An iris is identifiable in the upper left corner, a poppy in the lower left corner, and a narcissus four

115 Verma, *Painting the Mughal Experience*, op.cit., p. 104.
116 Welch, *The Emperors Album*, op.cit., p. 150, pl. 32.

plants from the right in the lower border. A Narcissus bulbocodium is the small plant third from the right in the upper border. There is no reason to suppose that Harif was not responsible for this border as well as for that of the painting.

The birds painted around the calligraphy panels may be identified as follows river chat (Chaimarvarnis leucocephaus), at right above the first line of calligraphy, common rose finch (carpodacus erythrinai) above the second the third and fourth lines of calligraphy from the bottom along the central vertical axis, white wagtail (Notocilla alba), at right above the fourth line of calligraphy from the bottom, egret (egretta), bottom right corner. In the upper right corner a black buck (Antilopa Cerricapra) is being attacked by a *Cheetah* (Acimonyx jubata).[117] (plate 44)

Another example of border painting is the portrait of spotted fork tail. It is a very fine and unique painting of fork tail (f.15r. MMA., New York). This magnificent painting has an equally magnificent border, consisting of supremely fine and delicate floral scrolls with much gold brushed into the varicolored petals. At the bottom of the picture an inscription in tiny letters states that the gilding was by Harif.[118]

The other example is the calligraphic sketch of a Persian verse (f. 10.7V. The MMA., New York). In which the design shows gracefully scrolling palmettes, leaves, flower heads, and buds on delicate stems with

117 Ibid., p. 163, pl. 39.
118 Ibid., p. 166, pl. 40.

different varieties of birds perched at intervals on them with a ribbon band looping and arching above them.[119]

The other example is the portrait of Zebra (f. I M 23-1925, V.A. Museum, London) which is the wonderful creation of Mansur in 1621. In this the delightful border, a spiraling arabesque of vines and blossoms, was added to the painting before it was bound into one of the royal albums.[120]

The simplest form of border illumination seen in the *Baburnama* (B.M.) comprises the unit: a leaf or a flower set with wavy tendrils in a pattern described as *bel*, a running pattern. A single leaf is also used as a unit repeated diagonally in between narrow bonds of the margin. In some cases variety is sought by an arrangement of alternate leaf and flower. Sometimes these motifs are spot set. It is notable that drawings of flowers and leaves are invariably executed in a thinly-shaded gold pigment with deep outlines.

The margins of the Manuscripts Bahristan, Diwan of Anwari, and Khamsa, referred above are also indicative of a change in theme of border decoration and also in treatment. They have highlights in colour and use tones of gold pigment. In them, the margins, comprising wildlife set against a hilly landscape, are thematically more elaborate. They depict hunting scenes, chasing wild animals, and very often birds and animals in a resting position. Fabulous animals, most strikly a lion with the characteristic flame like lines emanating from the body, too are depicted. A tiger or a lion hunting deer, the latter fleeing or wandering, or resting unaware of threat is a favourite theme

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119 Ibid., p. 35, pl. 27.
120 S.C.Welch, *Imperial Mughal Painting*, London, 1978, p. 92, pl. 27.

of the Mughal artists depicted in a variety of composition in the wide margins.[121]

Mughal artist preferred a naturalistic portrayal of objects. His work is characteristic and takes the form of portrait studies. In the motifs of flowering plants the pattern of the leaves spreads out from the base of the plant. In general, the drawings are very fine and the details of leaves and flowers are very crisply executed, identifiable, are treated as nature studies. Here the depiction of butterflies, bees and other insects hovering around the flowers adds to the natural surrounding and rhythm in composition, reminiscent of the traits of Mansur's flower painting. In an embellishment form, the plants with blossoms are executed in a gold on pink, deep blue, or a buff ground.

The plants ordinarily depicted in the margin decorations are poppies, lilies, irises, narcissus, tulips, daisies, borages, and similar common flowers of the hills and plains of India and also found in Persia, although at times these are so much conventionalized that it becomes difficult to identify them. One the edges of illustration 70 from Chester Beatty collection, some of the love list Kashmir flowers like the borage, lily, tulip, oleander, aquilegia, narcissus, and ranunculus are very clearly identifiable we have a painting by Govardhan, one of the best of Jahangir's painters. From the same collection we have a painting by Bichitra, on the margins of which are white, pink purple lily, tulip and borage flowers, all very naturalistically rendered.

The border pictures are complete works of art in themselves. Truly in their perfection they stand almost, alone in Indian miniature painting. As

121 Verma, *Painting the Mughal Experience*, op.cit., p. 104.

Percy Brown observes, "It is difficult to imagine a richer or more glorying work of pictorial art than one of these flower framed miniatures of the Jahangir court painters. Certainly these borders give the miniatures a beauty and impressiveness which were hitherto unknown in miniature painting".[122]

122 . Ibid., p. 106.

Chapter - 3

Hunting and Other Sports

HUNTING AND OTHER SPORTS

Since barbaric ages the hunting instinct has affected man, and even at this civilized stage of society he is not fully free from it. The only difference is that in ancient times it was one of the major means of subsistence and today it is a game, and a pastime and source of amusement. The privileged class spends its leisure in enjoying the chase. The Mughals who were descendents of Chengez Khan were very fond of hunting (*shikar*) and followed the rules framed by their ancestors; they followed the rules laid down by them even in the *shikar* parties.[1] Almost all the great Mughals were fond of this game, and they spent over it as much time as they could spare from their pressing royal engagements and other pastime. Hunting was also used as a means of enquiring into the condition of people as Abul Fazl writes, "He (Emperor Akbar) always makes hunting a means of increasing his knowledge, and besides, uses hunting parties as occasions to inquire, without having first given notice of his coming, into the condition of the people and the army. He travels in cognition and examines into matters referring to taxation or to sayurghal lands, or to affairs connected with the household. On account of these higher reasons his Majesty indulges in the chase, and shows himself quite enamoured of it".[2] One of these rules was that, a young man should surrender his share of the hunt to his elder in case the latter was also taking part in the chase.[3]

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1. M.A. Ansari, The hunt of the great Mughals, *Islamic Culture*, Vol. XXXIII, No. 1, Hyderabad, January, 1959, p. 1.
2. Abul Fazl, *Ain-I Akbari*, tr. H. Blochmann, vol. I,New Delhi, 1977, p. 292-93.
3. M.A. Ansari, op.cit., p. 1.

The Mughal Emperors were very much interested in a special kind of large scale enclosed hunting known as *qamargah* (Hunting ground) and such pleasant hunts were frequently arranged for them, in which the important nobles of the state and, sometimes, even the commoners (male and female both) also participated.[4] The Emperor normally went on hunting when they were on expedition. They spared lot of their time for *shikar* and special hunting grounds were reserved for the blue bloods, where they indulged in all sorts of *shikar*, that of tigers and lions, elephants, crocodiles, *cheetah* (leopard) and blue bull, wild buffaloes, antelopes, cranes, waterfowl and so many other animals and birds. A large number of men took part in elephant and tiger hunts.[5] hunting grounds so set up were kept under the charge of *Qarawals* (game keepers) and mostly a prominent nobleman was appointed as a *Qarawal Baigi* (chief huntsman), who accompanied the emperor and received *shikar* related message from the *Qarawals* and transmitted it to His Majesy. [6] In the reign of Shah Jahan, Allahawardi Khan was appointed as *Qarawal Baigi.*

As regards *qamargah* we are informed that they formed a kind of hunting circle round the *shikargah* (hunting ground). Men on horseback or on foot surrounded a particular spot (*qamargah*) in the jungle where the game abounded. They then contracted it, till the spot where the animal was spotted was completely surrounded on all sides by them. The animals thus hunted encountered hunters on all sides. Little space was left for them to escape. It was a form of *shikar* in which everybody took his share, from an ordinary soldier to a nobleman. When they indulged in the *qamargah* of the deer or the (blue bull)

4. P.N. Ojha, *North Indian Social Life during Mughal Period*, Delhi, 1975, p. 57.
5. M.A. Ansari, op.cit., p. 2.
6. Ibid, p. 2

nilgai, the forest was sometimes encircled by high nets or *sara-pardah* (high screens).[7] The very high security of the *shikargah* was maintained.

During the reign of Mughals we find so many *qamargahs* (hunting grounds) that were situated at Bari, Hisar, Sunnam, Bhatindah, Bhatnir, Nagaur, Narwar near Gwalior, Palam near Delhi, Sheikhupura/Jahangirpur near Lahore, Girjik and Nandina, Jalalabad and Sahara.[8] Jahangir built several country houses and hunting lodges. The most outstanding hunting ground is Shaikhupura near Lahore.

In the *Ain-i-Akbari*, Abul Fazl writes that Akbar was very fond of hunting lions, tigers, elephants, *cheetah*, deer, waterfowl, dogs, wild asses, etc. and he has also devised new methods for that purpose.[9]

Abul Fazl mentioned in the *Akbarnama* that "after eight hours, fifteen minutes of Tuesday 29 Shaban 974, 11 March 1567, the sun entered (Aries) and the 12th year, to wit, the year *Isfandarmaz* of the first cycle began, and the equable mind of the *Shahinshah* felt a desire of hunting and for the *qamargah*, which is the most delightful form thereof. An order was issued that birds and beasts should be driven together from near the mountains on the one side, and from the river Bihat (Jhelum) on the other. Each district was made over to one of the great officers, and *Bakhshis*, *Tawacis* and *Sazawals* were appointed to drive the game .... At length there was suitable completion of arrangements, drum-beaters were collected, and there was a large assemblage of animals... First H.M. the *Shahinshah* went to the hunting ground, and viewed it from the

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7. M.A. Ansari, op.cit., pp. 13-14.
8. Ibid., p. 1.
9. *Ain*, op. cit. p. 293.

circumference to the centre. He used the arrow, the sword, the lance and the musket. At the beginning, the hunting ground was ten miles in circumference.... The officers put up screens in front of their stations and guarded the game, in the daytime by their eyes, and in the night by blazing torches. There was pleasure from morning till evening and from evening till morning . After H.M. the *Shahinshah* had, during five successive days, enjoyed various kinds of sports, the great officers and the attendants on the *haram* were allowed to come into the hunting ground... One of the wonderful occurrences that took place during the hunting was that Hamid Bhakkari one of the *yesawals* had become evil-minded and had placed an arrow on his bow and discharged it against one of the servants of the court. The latter abided his time and reported the matter to H.M. in the hunting ground. On this account the mystery of destiny was accepted and his life spared, but as a warning his head was shared and he was mounted on an ass and taken round the hunting ground.[10]

This event picturised in a double-page illustration of the *Akbarnama,* preserved in the Victoria and Albert Museum, London, titled "Akbar stage a *shikar* near Lahore" (No. I.S.2-1896, 55-56/117). The left hand page was painted by Miskin and Mansur, the right hand page by Miskin and Sarwan. A close look at the paintings is quite revealing and it exhibits the fauna of the Lahore region at the time of Akbar.[11](plate 5)

Pelsaert refers to the pleasures of the game of hunting thus "Hunting with leopards is a remarkable form of sport.... Sometimes also, but, very

10 . Abul Fazl, *Akbarnama*, tr. H. Beveridge, vol. II, Delhi, 1972, pp. 416-19.
11 . S.P. Verma, ed. *Flora and Fauna in Mughal Art,* Marg, Mumbai, 1999, p. 94, pl. 7 & 8,

rarely, the king hunts buck with buck.... These hunting pleasures surpass those of our country".[12] He also refers to Jahangir's interest in lion hunting, and says that the Emperor, while young preferred shooting to all other forms of sport.[13] Manucci refers, in great details, to Shah Jahan's tiger hunting with the help of buffaloes and elephants.[14]

During Jahangir's reign the evening *darbar* in the camp did not held, instead, he went to enjoy the hunt. The period of hunting depended upon the sweet will of the emperor. Sometimes it lasted a week or more. Jahangir surpassed his ancestor in sparing time for *shikar* and once he indulged in it for three months and six days continuously. Women also actively participated in hunting.[15] Jahangir went on hunting excursions with Nur Jahan and his ladies and stayed in camp for 10 days and sometimes two to three months. Nur Jahan was a keen hunter and shot tigers on the top of an elephant. On one occasion using only six bullets to kill four tigers.[16] Jahangir mentions on one occasion, he hunted hundred red deer, his sisters and other ladies were with him.[17] As on one occasion Jahangir had vowed that he would not injure any living thing with his hand. He told Nur Jahan to shot a tiger. Nur Jahan hit the tiger with one shot that it was immediately killed. His majesty entered the *Shikargah* (hunting ground) accompanied by his noblemen and a few other persons. His armory

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12. Pelsaert, *Jahangir's India,The Remonstrantie of Francisco Pelsaert*, tr. W.H. Moreland, London, 1972. p. 51.
13. Ibid., p. 51.
14. Manucci, Nicoloa *Storia do Mogor 1656-72*, tr. W. Irvine, vol. I, London, 1907-08 p. 91, Tiger hunting with the help of long horned buffaloes, has been described here. A large number of buffaloes, sometimes, more than one hundred were kept, in rows, in the front on each of these buffaloes, there mounted a man with his legs guarded by a leather covering. The king mounted an elephant.
15. Jahangir, *Tuzuk-i-Jahangiri*, ed. H. Beveridge, tr. A. Rogers, vol. I, New Delhi, 1978, p. 83.
16. Ibid, p. 375.
17. Ibid, p. 130.

(*qur*) also followed him, but remained five *Karuh* behind. Akbar usually entered the arena alone or with two or three trusted friends. Jahangir cared little whether there were "many or few" attendants or whether it was "rainy or windy".[18] The Mughals enjoyed leisurely and uninterruptedly the sport of the nature of the game.

Jahangir's memoir is a complete record of all aspects of hunting and also of those who loved hunting. The animals that were objects of *shikar* were classified according to the pain and peril, the hunter was likely to suffer. The *shikar* of a tiger or a lion was considered to be a royal privilege for it; the rest required previous sanction from the king. Tiger or lion hunting was very dear to Jahangir. He was so interested in the tiger hunting that upto the age of fifty he had killed eighty six tigers.[19] He adopted various methods either to catch or kill the ferocious beast. Mughals shot the beast from the *hawdah*- a seat fastened on the back of the elephant. Jahangir was skilled marksman and he often displayed his dexterity by inviting part of the body of the animal to be shot. Jahangir writes, in 1615, Jahangir was at Ajmer and prince Karan had come to pay homage to the emperor. Just before the prince wanted to take leave to go home, *shikaris* brought news of a lioness near Anasagar lake. Jahangir immediately decided to shoot it and took prince Karan with him whom the emperor wanted to show his hunting skill. On being asked at which part of body Jahangir should shoot, the prince desired that the lioness be shot in the eye. Jahangir writes, "by chance there was wind and disturbance in the air, and the female elephant on which I was mounted was terrified of the tigress [sic]

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18. Ibid, p. 140.
19. Ibid, vol. II, p. 270.

and would not stand still. Notwithstanding these two great obstacles in shooting, I shot straight towards her eye. God Almighty did not allow me to be ashamed before that prince, and as I had agreed, I shoot her in the eye. The weapon used by Jahangir was a musket that is, a smooth bore, muzzle loading, matchlock, which did not possess the accuracy of a modern day magnum rifle".[20]

The painting titled "Jahangir showing his hunting skill to Karan" by an unknown artist, is preserved at the Indian Museum, Kolkata (No. R 316/S.163). It is a graphic representation of a hunting scene. It shows that Jahangir has just shot the lioness, which is in her throes of death with her right forepaw covering her eye. Others in the picture look on in equal amazement some of them pointing at the lioness. This picture, like the one of Akbar, at Narwar, is a record of Imperial prowess.[21]

Aurangzeb also enjoyed hunting very much. Bernier refers to the Emperor's keen interest in the hunting of lion, *cheetah*, antelopes, blue bull or grey oxen and other wild animals, in the company of the high nobles and sometimes, even the commoners.[22]

The Mughal Emperors had peculiar habits and notions. Akbar never hunted on Fridays. While Jahangir did not go for hunting on Thursdays as this was the day of his accession and Sundays also because it was the day of his father's death.[23] Jahangir gave up killing after he had attained the age of fifty, but broke the vow after Shah Jahan's rebellion. The flesh of hunted animals

20. *Tuzuk*, op.cit. vol. II, p. 160
21. Verma, op.cit., p. 102, pl. 5.
22. Francois Bernier, *Travels in the Mogal Empire A.D. 1656-68*, Oxford, 1907, pp.375-79
23. *Tuzuk*, op.cit., vol. II, p. 184.

was distributed among the members of the royal family, the nobles and the soldiers. Sometimes it was sold in the market and the money realized was distributed among the poor. A record of animals and birds killed by the emperor was jealously preserved by chroniclers. While Jahangir most proudly records them in his memoirs. Sometimes the Mughals commemorated an unusual hunt or the death of a favourite tame deer by erecting monuments.[24]

The Tiger or the Lion Hunt :

During the Mughal period under review the *shikar* of a tiger or a lion (Felis tigris) was considered as a royal privilege. Nobody could kill it unless permission was obtained from the king previously.[25] Tiger hunting was not mentioned by the chroniclers of the reign of Babur and Humayun. Akbar indulged in the sport with great enthusiasm, a practice which was followed by his son Jahangir and his grandson Shah Jahan. But his great grandson, Aurangzeb, seems to have discarded the dangerous sport, though in the early part of his reign he killed blue bulls, deer and tigers with delight.

Abul Fazl mentions that "one of the occurrences was that the joyous heart, of H.M. the *Shahinshah* turned towards hunting, and he went to the neighbourhood of Mathura with a select party. The hunting was successful one day that tiger hunted seven tigers. Five were leveled with the dust by arrow and bullet, and one that repository of courage caught alive and so was the subject of a thousand wanderings. The other was caught by the united efforts of a number of *Bahadurs*".[26]

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24 . M.A. Ansari, op.cit., p. 2.

25 . Pelsaert, op.cit., p.52, Bernier, op.cit., pp. 278-79, .

26 . *Akbarnama*, op.cit., vol. II, p. 294.

In another instance, while travelling through Mewat on tuesday 15 *Ramzan*, 14 March 1568, the emperor indulged in hunting by the way. The huntsmen pointed out a tiger-jungle and H.M. the *Shahinshah* went there to hunt the beast when he came near the reed-bed, suddenly a formidable tiger came out. The courtiers lost control of themselves and pinned the animal to the earth with life taking arrows ... while H.M. was saying this, another tiger, as a formidable as the first one, came out and moved towards him. H.M. mounted as he was, watched the tiger's eye and shot an arrow at him. The tiger, wounded as he was daringly advanced, and came out on the high ground and sate there (?) in his wrath.... I have heard from the holy life of the Shahinshah that H.M.Jahanbani Jinnat Ashiyani used to relate that God had so ordained it that when a number of persons went for tiger shooting the tiger always kept his eyes on the person who was destined to shoot him. H.M. told me that he had noticed this on many occasions when he went out shooting, and found it come true".[27]

The *shikar* of a tiger was not only "perilous" but "peculiarly royal". A successful kill was considered a good omen, while a miss or an escape of the beast was a sign of bad luck.

Abul Fazl records an incident that occurred "when Akbar was returning to Agra from Malwa in 1561. His cavalcade was attacked quite unexpectedly by a tigress and her five adult cubs at Narwar near Gwalior. Akbar slew the tigress with his sword while his soldiers and courtiers quickly dispatched the rest. The *Akbarnama* is full of the incident in so far as it records approvingly

27. Ibid., p. 482.

the young emperor's remarkable feat of bravery. It also records that this was the first time that Akbar had slain a tiger. Abul Fazl started writing the *Akbarnama*, twenty nine years after the incident. The text is remarkably silent about the animals – infact, Abul Fazl calls tigers *babri*, a word more appropriate in India for lions or *Babbarsher*, regrettably, one can not learn much from the text. It was left to the painters to preserve the accuracy of the incident". This incident has the double page illustration titled "Akbar slays a tigress which attacked the royal cavalcade" executed by Basawan and Tara Kalan from *Akbarnama*, preserved in the Victoria and Albert Museum, London (No. I.S.2 1896.17/117).[28]

Jahangir writes that "one day he went to hunt tigers in the borders of Hindustan, and was riding an elephant. A very large tiger came out from the wood, and made for the elephant. He threw a javelin (*khisht*) and struck the tiger's chest. The tiger enraged at the pain, came up on the elephant's back and the Amir knelt down and struck him such a blow with his sword that he cut off both the tiger's forefeet, and the tiger fell backwards and died. It happened to me once when I was prince that I had gone out in the Punjab to hunt tigers. A powerful tiger appeared out of the wood. I fired at him from the elephant and tiger in great fury rose and came on the elephant back, and I had not time to put down my gun and seize, my sword. Inverting the gun, I kneel, and with both hands struck him with the stock over the head and face so that he fell on the ground and died".[29]

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28. Verma, op.cit., p. 100, pl. 4.
29. *Tuzuk*, op.cit., vol. II, p. 270.

This incident has single page illustration, titled, "Narrow escape of the emperor Jahangir while shooting a lion" preserved in Indian Museum, Kolkata (No. 188).[30]

Diverse methods were adopted either to entangle the beast or to kill it. The boldest and the most exciting method of hunting that tiger were to kill it by bow and arrow or by a matchlock. The Mughals mostly shot the beast with a gun from an uncovered *howdah* placed on the back of an elephant. Akbar, Jahangir and Shah Jahan, all of them, adopted the same method, which provided great excitement. They run great risks in killing the animal.[31]

Abul Fazl mentions various methods of trapping and hunting tiger which were adopted by the Mughals. First one was, one large iron cage was placed at a spot frequented by a tiger. A goat was tied in it to entice him in. The door was kept open but fastened in such a way as to close at the slightest shaking. The entry of the beast sealed its doom. As soon as he enters, he is caught. It was not so dangerous, but it was pleasuring to look at.[32]

Another method was to hang a poisoned arrow in a camouflaged bow on a tree in the jungle. It was arranged in such a manner that a slight movement let the arrow fly. As the tiger passed the vicinity, it became an easy victim of poisoning.[33]

Another method of hunting a tiger was that a sheep was tied in the forest. Stalks of hey covered with glue were spread on the ground nearby. It stuck into claws of the beast as he advanced towards the sheep. The more he

30. Percy Brown, *Indian Paintings under the Mughals,* New Delhi, 1981, pl. XLIII.
31. Pelsaert, op.cit. p. 53, *Tuzuk*, op.cit., vol. II, p. 270.
32. Abul Fazl, *Ain-i-Akbari*, tr. H. Beveridge, vol. II, Reprimt, Delhi, 1972, p. 293.
33. Ibid., p.293.

tried to free himself the more he got entangled in it. In the end he got exhausted and was captured alive by the hunters. The lion was also killed in the *qamargah* manner. A spot in the jungle was encircled with high nets. When the arrangements were complete, the emperor entered on the back of an elephant, accompanied by his *amirs* and the grand master of the hunt.[34]

Another method adopted was to lead a male buffalo with a rider upon its back to attack the tiger. The buffalo used its horns against the onslaught of the tiger, and flung him upwards, consequently depriving him of his life. "It is impossible", writes Abul Fazl to describe the excitement of this manner of hunting tiger. One does not know what do admire more, the courage of the rider, or his skill in standing firm on the slippery back of the buffaloes". By the middle of the 17th century a large number of buffaloes were employed to hunt tigers in the form of a *qamargah*. Tigers were hunted in this form whenever a large number of them assembled in a place. They were trapped in a circle. About a hundred or more of buffaloes were let into action "in the formation of half-moon". When they sighted the beasts they formed a circle, taking the pray in the midst. Trapped animals tried their level best to get out of the ring, "springing in the direction best suited", but the buffaloes "with great dexterity", seized them by their horns and tore them asunder. Those that escaped the ring of doom were shot by the emperor and his retinue. Buffaloes were ridden by men who carried naked swords in their hands. When the tiger sprang, the rider jumped off the back of the buffaloes "with agility".[35]

34 . Ibid., p. 293.
35 . Ibid., p. 293.

After the kill, officers took charge of the beast, packed it in a sack, sealed it and brought it to His Majesty's tent, here they "accurately measured" its size, length, the dimension of its claws and recorded its colour and the date of the kill. The officer in charge of poison then removed the whiskers of the dead animals.[36]

Elephant Catching:

Catching of elephants (Elephas maximus) was a sport dangerous and risky. The Mughals were fascinated by the elephant migrating from the remote Central Asian state of Farghana, they did not have much familiarity with this huge, strange looking animal. Emperor Babur was impressed with its sharp intelligence, faithful nature, and indispensability in the battle field.[37] Akbar took a keen interest in the hunting and taming of wild elephants which had been in vogue in India for a long time. He chased them on horseback in the jungles of Narwar and captured many. Jahangir also liked elephant hunting and taming. He watched them being caught from the top of a tree where a wooden platform was prepared for him. There is no direct evidence to believe that Shah Jahan and Aurangzeb indulged in elephant catching. No reference to it can be traced in the annals of their reign.[38]

Abul Fazl mentioned, "on 4 Jan. 1566, in three marches Akbar reached Benaras and shed the lights of justice over all the inhabitants thereof. He ordered his camp to halt there, and went on with some chosen followers to chunar. He surveyed the inside and outside of the fort and received inward and

35. *Ain-i-Akbari*, op. cit., p. 270.
37. Verma, op.cit., p. 36.
38. Ansari, op.cit., p. 6.

outward pleasure. Meanwhile the hunters brought the glad news of elephants being in the forests in the neighbourhood of the fort, and he proceeded with a number of special attendants to search in these forests. After exploring about two *kos* they came upon a herd of elephants. He directed that those mountains like forms should be surrounded on all sides and then following out the rules of hunting, ten elephants were captured".[39] Akbar was also interested in capturing the wild elephant. The *Akbarnama* refer an incident "It was end of the day when one of the savage denizens of those wilds who are in their language called *bhils* came to the camp and gave an indication of where the herd was. Nearly seventy elephants were seen in motion. Among them, one mast elephant was remarkable for the beauty of his movement. Bravemen proceeded to drive the animals from all sides. That elephant in his pride and most condition paid to attention to them..... His majesty genius engaged itself in capturing the aforesaid elephant..... An order was give that the elephant Ram Bhirun who was a powerful animal and distinguished among the special elephants, should be brought and made to herd the elephant aforesaid. Again these two mountain forms contended together. As the wild elephant had fought a great deal, he was nearly overcome. The drivers brought him to the foot of a large tree and bound him with strong ropes. Slowly he grew tame, and was gradually included among the special elephants he received the name of Gajpati......[40]

This incident has double-page illustration in the *Akbarnama*, preserved in the Victoria and Albert Musuem, London, titled, "Akbar inspects the capture

39 . *Akbarnama*, op.cit. Vol. II, pp. 393-94.
40 . Ibid., p. 354-56.

of a wild elephant" (No. 2/1896 IS 39/117. It is composed (*tarh*) by Lal and painted (*amal*) by Sanwala.[41]

Though Jahangir's interest in elephants was not as all pervading as Akbar's, it was much more than usual. The *Tuzuk* is full of references to elephants of rare quality and character commanding a high price and reputation. He even participated in an elaborate *kheda*, or elephant trapping expedition, near Dohad during his leisurely travels to Gujarat and central India and captured many elephants.

In *Tuzuk*, Jahangir mentioned about his hunting experience that "on Saturday, the 11th 1618, marching from Dohad with the intention of hunting elephants, I pitched at the village of Karabara (Garbara?). On Sunday, the 12th, the village of Sajares (Sajwara?) became the place of alighting. It is 8 *kos* from this place to Dohad, and 1 ½ *kos* to the hunting ground. On the morning of Monday, the 13th, I went to hunt elephants with a body of my private servants. As the grazing place of the elephants in a hilly country, with elevations and depressions, a passage is obtained with difficulty by one on foot. Before this, a large body of horse and food had surrounded by the jungle after the manner of a *qamargah*, and outside the jungle, on a tree, they ad prepared a wooden platform for me….. the tribe of Jarge whose special employment is the hunting of elephant and it had been arranged that they should bring the wild elephants from the jungle into my presence, that I might witness the hunt – in this hunting expedition one elephant was captured, very handsome in shape, of good breed, and perfect marks".[42]

41 . Geeti Sen, *Paintings from the Akbarnama*, Varanasi, India, 1984, pl. 29.
42 . *Tuzuk*, op.cit., vol. II, p. 45.

The hunt of this huge animal was conducted in different ways. Sometimes the hunters entered the jungle either on horseback or on foot. They during summer to the grazing place of this wonderful animals, and commence to beat drums and blow pipes, the noise of which makes the elephants quite frightened. They commence to rush about, till from their heaviness and exertions no strength is left in them. They are then sure to run under at tree for shade, whom some experienced hunters throw a rope mode of hemp or bark round their feet or necks, and thus tie them to the trees. They are afterwards led off in company will some trained elephants, and gradually get fame.[43]

Another method as that the hunters went into the forest in several batches accompanied by tamed elephants. They take a tame female elephant to the grazing place of wild elephants, without moving or giving any other sign of his presence. The elephants then commence to fight, when the driver manages to secure one by throwing a rope round the foot.[44]

Another method a deep pit is constructed in a place frequent by elephants which are covered up with grass. As soon as the elephants came near it the hunters from their ambush commence to make a great noise. The elephants get confused, and losing their habitual cautiousness, they fall rapidly and noisily into the hole. They are then starved and kept without water, when they soon get fame.

Another method was, they dig a ditch round the resting place of elephants, leaving only one road open, before which they put up a door, which is fastened with ropes. The door is left open, but closes when the rope is cut.

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43 . *Ain-i-Akbari*, op.cit., p. 295.
44 . Ibid., p. 295.

The hunters then put both inside and outside the door such food as elephants like. The elephants eat it up greedily; their voraciousness makes them forget all cautiousness, and without fear they enter at the door. A fearless hunter, who has been lying concealed, then cuts the rope, and the door closes. The elephants start up, and in their jury try to break the door. They are all in commotion. The elephants run about till they get tired, and o strength is left in them. Tame females are then brought to the place, by whose means the wild elephants are caught. They soon get tame.[45]

From times of old, people have enjoyed elephant hunts by any of the above modes. Akbar had invented many new manner of hunting, which admits of remarkable fitness. In fact, all excellent modes of hunting were inventions of Akbar.

Cheetah (Leopard) Hunting :

The leopard (Felis jubata), commonly called *cheetah* in India, the Mughals normally used leopard for the hunt of deer or blackbuck. The hunting of *cheetah* was most delightful and favourite game of the Mughals. For a steady flow of the animal in the Imperial stud an elaborate system of catching the animal was necessary. Akbar was very fond of catching the *cheetah* by his own aversions. The keeping of cheetahs for hunting purposes was flourishing activity at Akbar's court, and the emperor took a personal interest in the capturing of the animals from the wild, and their care during training.

Abul Fazl writes, "one of the joy-increasing occurrences was H.M. the *Shahinshah's* engaging in the hunting of *cheetahs*. The lord of the world,

45 . Ibid., p. 295.

though under various forms he appears to be enjoying himself, is in reality carrying on the worship of God. He both tests men and discovers the secrets of the kingdom. With this view he makes hunting a means of gaining knowledge, and employs himself in real devotion. Among these things he especially inclined to the hunting of *cheetahs*, and he has traps made for catching them. The custom was that when news was brought of a *cheetah* having fallen into a trap, he immediately mounted a swift horse and went off to the spot. By proper methods the *cheetah* was brought out form the hole and made over to the skillful in the business. On this occasion news was brought that a powerful *cheetah* had fallen into a hale in the neighbourhood of Gwalior. On the day of ormazd the 1st Azar, Divine month, corresponding to Sunday 4 Jamada at Akhir, he mounted his horse and proceeded towards Gwalyar. When he came to the hole he himself bound the cita and took it out".[46]

Abul Fazl records a incident, "one of the joyful occurrences was that at the time when the army was encamped at Sanganir in 1572 near Tajipur, H.M. according to custom, engaged in hunting. He was at this time much devoted to hunting with *cheetahs'* and after assigning *cheetahs* to numerous parties he went off himself with some special attendants. It chanced that they loosed a special *cheetah* (*cita-i-khas*) called *Citra Najan* at a deer. Suddenly there appeared in front of them a ravine which was twenty five yards broad. The deer leapt into the air to the height of a spear and a half and conveyed itself across. The *cheehtah* in its eagerness took the same course, cleared the ravine and seized the deer. On beholding this astonishing occurrence the spectators raised a cry of amazement and there was great rejoicing and astonishment. The

46 . *Akbarnama*, vol. II, p. 509.

khedive raised the rank of that *cheetah* and made him chief of the *cheetahs*. He also ordered that as special honour and as a pleasure to men, a drum should be beaten in front of that *cheetah*".[47]

This incident is accurately portrayed in a painting titled "Akbar hunts with trained cheetahs" by Lal and Sanwala in the imperial *Akbarnama* preserved in the Victoria and Albert Museum, London (No. I.S.02-1896-93/117).[48]

Jahangir was also interested to catching the *cheetahs* for the hunt of black buck and deer. In the period of 1600-1604 by the turn of the century Salim had became impatient and head strong: he rebelled against his father Akbar and took himself down the river to Allahabad where he set up his own court, assuming the title "Shah Salim' in defiance of the fact that his father still reigned. During this time he was engaged in hunting and he also captured a cheetah.

This event has single page illustration in the *Tuzuk-i-Jahangiri*, titled "Prince Salim catching a cheetah at Allahabad" executed by Aqa Riza, c. 1600 Allahabad, preserved in the Victoria and Albert Museum, London (I.S.2/1896). In this painting the prince kneels on the ground to lift the blindfolded cheetah by the head, two assistants taking it by the feet, so that it can be placed in a carrying fold prior to being caged; a servant attempts to wave flies away from the Prince's head. Outside the specially prepared corral, men bring the cage and the bullock cart on which the cheetah is to be transported.[49](plate 19)

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47 . Ibid., p. 539.

48 . Sen, op.cit., pl. 10, p. 46.

49 . Toby Folk and Simon Digby, *Paintings from Mughal India*, London, 1983. p. 36, pl.16

Akbar invented various methods for catching leopards. Formerly hunters used to make deep holes and cover them with grass. These pits were called *odi*. The *cheetah* treading on it fell down. Frequently it broke it leg in the process. It also managed to jump out and escape again into the wilds. Akbar improved the size of the pit, whose depth was lessened to three or four *gaz* (yards), with a peculiar trap door constructed at its mouth. When the *Cheetah* laid its feet on it, the door gave way under its height. It again closed down which the animal had fallen into the pit.

At the time of their heat, which takes place in winter, a female leopard had been walking about on the field, and six male leopards were after her. Accidently she fell into a pit, and her male companions, unwilling to let her off, dropped in one after the other, a nice scene indeed.

Akbar also caught *cheetah* by tiring them out, which was very interesting to look at.

Another method of trapping a *cheetah* was to fasten nooses to the foot of a tree (*akhar*). Once an animal approaches near the tree and tries to scratch it, it gets entangled.[50]

Akbar caught the *cheetah*, brought it out of the *odi* himself and handed it over to the keepers who trained it for hunting the deer. Many cheetahs were hunted by him in this way, their number, and at times reaching seven to ten.

An elaborate system was devised to train *cheetahs*. A separate staff was employed for the purpose. He had as many as two hundred keepers in charge of hundred animals, all classified and named according to their individual

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50 . *Ain-i-Akbari*, op.cit., pp. 296-97.

qualities. A *cheetah* was trained within a period of eighteen days. *Khasa* leopards were dressed in brocade saddle-cloth. Their chains were studded with jewels. A coarse blanket was allotted to them, and carpets were also provided to sit on. Ten leopards formed a *mithl* or *taraf* (section). One of Akbar's *cheetahs* was called '*Samand Naik'*. It came out with great pomp and show, servants fully equipped by its side and *naqqaras* (drums) being beaten in front of it. Other two cheetahs enjoying the same privilege were named '*Chitr Najan'* and 'Fateh Khan'.

Attracted by the wonderful influence of the loving heart of His Majesty, a leopard once followed the imperial suite without collar or chain and like a sensible human being, obeyed enjoyed it very much to have its skill brought to the test.

Akbar generally hunts leopards thirty or forty kos from Agra, especially in the districts of Bari, Simna wali, Alapur, Sunnam, Bhatinda, Bhathir, Patan in Punjab, Fatehpur, Jhinjhano, Nagor, Mirath, Jodhpur, Jaisalmir, Amarsarnayin, but several other more remote spots have been selected as hunting grounds.[51]

Proper conveyance was provided to carry them to the *shikargahs* (hunting grounds), for instance, litters (mahfah) hanging from the backs of elephants or camels or mules or horses, or *chawdals* or carts (*arabah*), as the case might be.

Akbar had about one thousand *cheetahs* in his park. Jahangir owned the same number of *cheetahs.*

51 . Ibid., p. 297.

Deer Hunt :

The hunt of deer was conducted by a variety of methods, which included the *qamargah*, hunting with the *cheetah*, employing a tamed buck to hunt the wild animal of the same species, and enticing or shooting it with arrows in torch light. Jahangir states that once he had made a *Shakhband* (literally a tying together of horns or branches). Twenty seven red deer and 68 white ones came into the *Shakhband*. I myself struck with arrows 29 antelopes, and Parwiz and Khurram orders were given to the servants and courtiers to shoot. Shah Jahan was the best shot, and in every case of his striking an antelope the arrow penetrated through ad through. Again, on the 14th of the month of Rajab, Zafar Khan had arranged a *qamargah* at Rawalpindi. I struck with an arrow a red-deer at a long distance, and was highly delighted at the arrow striking him and his falling down. Thirty-four red deer and 35 *qaraquyrugh* (black-tailed) antelope, which in the Hindi language they call *Chikara*, and two pigs were also killed".[52]

"On the 21st another *qamargah* had been arranged within these *kos* of the fort of Rohtas by the efforts and exertions of Hilal Khan. I had taken with me to this hunt those who were screened by the curtains of honour (the members of the zananah). The hunt was a good one and came off with great éclat. Two hundred red and white anteleopes were killed, there are in no place in the whole of Hindustan, with the exception of Girjhak and Nandanah".

Jahangir writes, the milk of the antelope, of the cow, and the buffalo in no way differs. They say it is of great use in Asthama.[53]

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52. Tuzuk, op.cit., vol. I, pp. 128-29.
53. Ibid., pp. 30, 141.

Govardhan has left us a painting loosely titled "Antelope and deer hunt", probably executed 1607-10 and now preserved in the Cleveland Museum of Art, Dudley (1939-66). An accomplished hunter, Jahangir continued his father's grand tradition and surpassed it with his acute observations on wildlife and hunting.[54]

Shah Jahan also refers about hunting of black buck. He writes, "At the close of the above month of Shaban 1043 (end Feb. 1634), when the standard of royalty arrived at the capital of Delhi. His Majesty went off to the preserves at Palam, which is one of the regular hunting grounds of that place, and lodged at the villas erected there by his father's and his own commands. He there amused himself with four days of sport, during that time, he one day bagged with his own gun 40 black bucks, everyone of which he brought down at the first shot".[55]

On some other occasion he also caught 300 black bucks.[56] The *shikar* of the deer was most interesting and amusing.

Hunting of Deer with Chitahs :

During the Mughals the *cheetahs* were trained to hunt the blackbuck and deer. They adopted all sorts of tricks to entice their victim. They generally went against the wind, smelling the scent of the prey. They raised the dust with their hind feet, thus placing a dust screen in between themselves and the prey. They lay flat on the ground camouflaging them in such a way that it was difficult to "distinguish them from the surface of the ground". In a day one *cheetah* would

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54. Verma, op.cit., pl. 6, p. 103.
55. Inayat Khan, *Shahjahannama: An Abridged History of the Mughal Empire*, tr. A.R.Fuller, Begley, Z.A.Desai, New Delhi, 1990, p. 122.
56. Ibid., p. 265.

sometimes catch twelve deer. "If it missed its prey", remarks Bernier, "It stood perfectly still".[57] The keeper went and after "great solicitation managed to enchain him". *Cheetahs* were sometimes let loose" right from the place the door was seen". They sprung swiftly and caught the pray on other occasions the *cheetahs* were released and the prey was sighted to them. They took cover behind bushes and other natural obstacles until they came within the range of the deer. Springing suddenly, in one leap they grabbed their prey. Another method resorted to was to set the *cheetahs* free and to move their carts in the opposite direction, thus perplexing the deer. In the meantime the *cheetah* would advance towards its foe, and successfully seize it. Akbar invented another method called *chatr mandal.* He hunted the deer by means of *cheetahs* in the *qamargah* manner. A large number of deer were first encircled and then a large number of leopards were let loose from any directions.[58] Thus in a short time a large number of deer were caught. Pelsaert refers "Hunting with leopards is a remarkable form of sport; these brutes are so accustomed to men that they are as tame as cats, whether they are reared from cobs or tamed when full grown. They are very carefully fed, and each has two men to look after him, as well as a cord, in which they sit, or are driven out, daily. When they come to a place where they sight buck, the *cheetah* is released from the cart, his keepers show him direction, and creeps on his fore feet until he gets a view, taking cover behind trees, plants or thickets, until he sees that his first quick rush and spring will be successful, for that is his only chance. Most of the leopards are so well

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57 . Bernier, op.cit., pp. 376-77.

58 . *Ain-i-Akbari*, op.cit., p. 298.

trained that they never, or very seldom, miss. Sometimes also, but very rarely".[59]

"On one occasion Akbar witnessed a delightful feat performed by a *cheetah* named *Chitr Nijan*. He was camping near the village of Sanganir. He went hunting with his close friends. The *cheetah* was released after a deer. While the chase was in progress, a ravine, 25 *gaz* in length, appeared. The deer, springing many feet above, the grounds crossed the ravine in one jump. But the *cheetah* was not to be easily hood-winked. It also leapt and caught the prey. Akbar was greatly pleased, so much so that he increased the rank of the *cheetah* and especially honoured it with a drum".[60]

This incident is accurately portrayed in a painting titled, "Akbar hunts with trained *cheetahs*" by Lal and Sanwala in the imperial copy of the *Akbarnama* preserved in the Victoria and Albert Museum, London (No. I.S.02-1896-931117).[61](plate 4)

Jahangir was interested in hunting of deer with cheetah. Jahangir writes, "On Thursday, the 11th there was a halt, and at the end of the day I went to hunt with cheetahs, and two black buck, four does, and a *chikara* were caught. On Sunday, the 4th, I also went to hunt with cheetahs, and caught fifteen head of male and female antelopes".[62]

On another occasion he writes, "on Sunday, the 21st, I enjoyed myself with hawking, and ordered Mirza Rustam, Darab K., Mir Miran, and other

59 . Pelsaert, op.cit., pp. 51-52.
60 . *Akbarnama*, op.cit., p. 539.
61 . Sen, op.cit., Pl. 10, p. 46.
62 . *Tuzuk*, oplcit., vol. II, p. 39.

servants to go and shoot as many *nilgai* as they could. They killed thirteen head male and female. Ten head of antelope were also caught with cheetahs".[63]

Setting was allowed freely on *Kashah cheetahs*. In the reign of Akbar, Sayyid Ahmad Barka, the noblemen in charge of *Khasah* leopards, got one *muhr* out of each bet, thus making plenty of money. *Bakhshish* was also given. Special presents were fixed for each successful animal. Skins of the deer were distributed among the poor as part of present money.[64]

Hunting of Deer with Deer :

The Mughals, right from Babur to Aurangzeb, enjoyed hunting of deer with deer. "A stone as big as a bale" was tied to the leg of a tamed deer by means of rope. The deer was left to graze in the field. A wild deer came to fight with it, the result being its own capture. The net got entangled in the horns of the wild deer. The tamed deer sprang and pulled the strings when it felt that the noose had caught its foe. The victim could not run away. Even if it was able to drag the tamed deer, the deer fetters would not allow it go a far. The hunters, who always lay in ambush, rushed and captured it. Sometimes one wild deer fought four tame deer. In the encounter either the rope gave way or the wild deer was made to exhaust itself by matching its skill with four adversaries.[65]

Pelsaert refers, "the king hunts buck with buck. For this form of sport, buck are so thoroughly tamed that when they have been set free, they will come back when called by their masters or keepers. When there is to be a hunt, a running noose, made of twisted sinews, is fastened on the tame buck's horns,

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63 . Ibid., p. 40.
64 . *Ain-i- Akbari*, op.cit., vol. I, p. 289.
65 . Ibid., p. 292.

and lies on his neck. When he sights a wild buck, he at once presents his horns to fight and they push and struggle with their horns, until the tame buck feels that the noose has caught. Then he springs back pulls so that they hold each other fast by the horns, until the men, who are standing a lying near, run up and capture the wild buck alive. These hunting pleasures surpass those of our country".[66]

Jahangir writes, "on Wednesday, the 21st, I went to Amanabad for the purpose of sport. Some days before this in accordance with orders, Khwaja Jahan and Qiyamk, the head huntsmen, had chosen a wide plan for a *qamargah* hunt and drawn an enclosure round it, and driven within it may antelope from the neighbouring plains. As I had vowed that I would hereafter not kill any living thing with my own hand, it occurred to me to take them all alive, and place them within the *Chaughan* (polo ground) of Fathpur, so that I might both enjoy the pleasure of sport and that at the same time no harm should happen to them. I accordingly took 700 head and sent them to Fathpur. As the hour for entering the capital was near, I ordered Rayman, khidmatiya to put up a screen on two sides, like a lane, from the hunting place to the Fathpur, and to drive the antelope there. About 800 antelope were sent in this way, or altogether, 1500".[67]

The Mughals also shot the deer with a gun. Jahangir by the 50th year of his age had killed about 215 red deer with his gun.[68] Shah Jahan shot 40 deer

66 . Pelsaert, pp. 51-52.
67 . *Tuzuk*, op.cit., pp. 83-84.
68 . *Tuzuk*, op.cit. vol. I, p. 369.

when he indulged in a *shikar* for four days at a stretch. On another occasion he bagged the same number in a day.[69]

Besides the methods mentioned above, many other methods of hunting deer may be traced in the annals of the period, for instance, *ghantah*, *hirah*, *thangi*, *bawkarah*, *dadawan* and *ijarah*.[70]

Jahangir owned about 3,000 deer and buck for hunting purposes.[71]

Rhinoceros and Alligator Hunt :

Babur was the only Mughal emperor who involved in rhinoceros hunting. Babur writes, "The Feb. 16, 1519 A.D. at Kabul. After starting off the camp for the river, I went to hunt rhinoceros on the sawati side which place people call also *Karg-khana* (Rhino-home). A few were discovered but the jungle was sense and they did not come out of it. When one with a calf came into the open and betook itself to fight, many arrow were shot at it and it rushed into the near jungle; the jungle was fired but that same rhino was not had. Another calf was killed as it lay, scorched by the fire, writhing and palpitating. Each person took a share of the spoil. After leaving sawat, we wandered about a good deal; it was the bed time prayer when we got to camp".[72]

This event has a single page illustration in the *Baburnama* (c. 1600) preserved in the British Museum, London, titled, "Babur hunting rhinoceros" (folio 305 b).[73](plate 2)

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69 . *Shahjahannama*, op.cit., p. 122.
70 . *Ain-i-Ak bari*, op.cit., vol. I, p. 292.
71 . Hawkins, op.cit., pp. 103/04.
72 . Babur, *Baburnama*, tr. A.S. Beveridge, vol. II, London, 1921,p. 378.
73 . Hamid, Sulaiman, *Miniatures of Baburnama*, Tashkant, 1970, p. 46.

Rhinoceros hunt seems to have fallen out of favour with his descendents, as no reference it can be traced in the annals of period.

Alligators frequented many rivers of India. We found only Jahangir hunted alligators. He gives one reference that "on Tuesday, the 7th I shot an alligator in the tank at Dhar. Though only the top of his shout was visible and the rest of his body was hidden in the water, I fired at a guess and hit him in his lungs and killed him with a single shot. An alligator is of the crocodile species and exists in most of the rivers of Hindustan and grows very large. This one was not so very big. An alligator has been seen (by me) 8 *gaz* long and 1 *gaz* in breadth".[74]

This event has single page illustration titled, "Prince Salim hunting Rhinoceros", a painting by a Mughal artist (c.1600-05). It may represent four different *shikar* events or more likely, is a portrayal of the Prince's outdoor life.[75]

The number of alligators (*magarmach*) killed by him upto the age of 50 was ten.[76]

Hunting of Nilgai :

The blue bull, commonly known as *nilgai* in India, is a common wild animal found in this country even today. The Mughals hunted it neither in the *qamargah* manner or shot it with a gun. Jahangir writes, "on Monday the 15, and Tuesday, the 16th, I went to shoot *nilgai*, and on each day shoot two blue bulls. On Friday, the 19th, I went to hunt, and killed a blue bull. I do not

74. *Tuzuk*, op.cit., vol. I, p. 408.
75. Verma, op.cit., Pl. 9, p. 106.
76. *Tuzuk*, op.cit., vol. I, pp. 369, 408.

remember a bullet passing through a large male *nilgai.* Many have passed through females on this day, at a distance of forty five faces (*qadam*), it went through both skins".[77]

Jahangir further refers, "Two or three days afterwards I saw another *nilgai.* However much exerted myself and wished he would stand still in one place, so that I might fire at him, I could get no chance with my gun on my shoulder I followed him till near evening until it was sunset, and despaired of killing him. Suddenly it came across my tongue, "Khwaja, this *nilgai* also is vowed to you", my speaking and his sitting down were at once and the same moment. I fired at and hit him, and ordered him, like the first *nilgai,* to be cooked and given to the poor to eat".[78]

In the early part of his reign, Aurangzeb once indulged in the sport for thirteen day at a stretch. During the period news was brought to him by a *qarawal* (game keeper) that two *nilgai* were fighting with ach other. The emperor proceeded to the spot and watched them fighting. After being defeated, one of them, ran away, and was followed by the other. Aurangzeb shot the first one with his gun 'Baibadal' in the thigh and the other with another gun, 'Safarban' in the chest.[79]

This incident has a single page illustration, titled "Aurangzeb hunting *Nilgai*".[80](plate 10)

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77 . *Tuzuk,* op.cit. vol. II, p. 40.

78 . Ibid., vol. I, p. 189.

79 . Ansari, op.cit., p. 13.

80 . Linda York Leach, "*Mughal and other Indian Paintings" from the Chester Beatty Library,* vol. I, London, 1995, pl. 75.

The *qamargah* of the *nilgai* was more or less a full-scale slaughter of the animal. The whole retinue joined bag.[81] They killed *nilgai* with swords, pikes, arrows and muskets. The flesh was distributed among the *amirs*.[82]

Wild Ass Hunt :

In the Mughal period, the wild asses were found in plenty in the Indian forests. The wild ass, called *Garkhur* in Persian. We found only two instance of the *shikar* of the wild ass. Babur hunted wild asses in the *qamargah* manner. Babur writes, in Kabul, next day (May 30, 1507) when we had ridden from that camp, a hunting circle was formed on the plan of *Kattawaz* where wild ass are always plentiful and always fat. Masses went into the ring; masses were killed. During the hunt I galloped after a wild ass, on getting near shot one arrow shot another, but did not bring it down, it only running more slowly for the two wounds spurring forwards and getting into position quite close to it; I chopped at the nape of it neck behind the ears, and cut through the wind-pipe, it stopped, turned over and died. My sword cut well! The wild ass was surprisingly fat. Its rib may have been a little less than one yard in length".[83]

This event has a single page illustration in the *Baburnama*, preserved in British Museum, London, titled "Babur hunting Kiangs" (f. 283b).[84](plate 1)

Akbar was also indulged in ass hunting. In the *Akbarnama*, Abul Fazl refers, "the prince of theosophists proceeded towards his goal. In appearance his wind was taken p with the pleasure of hunting.... The scouts reported that there was a herd of wild ass (*garkhur*). The sovereign proceeded to hunt them,

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81 . Bernier, op.cit., p. 77.
82 . *Tuzuk*, Ibid. vol. II, p. 40.
83 . *Baburnama*, op.cit. p. 325.
84 . Hamid, op.cit., Pl. 46.

attended by three or four special huntsmen. When he came near the peace he dismounted and proceeded on foot. At the first shot he hit an ass, and the rest of the herd fled away, at the report of the gun. That divine have took his piece gun in his hand and proceeded rapidly on foot over the burning sand, attended by the same three or four huntsmen. He soon herd and killed one after the other with his gun. He continued to follow them up, and on that day he shot thirteen wild asses. Whenever he killed one the others went further off than at first".[85]

This incident is accurately portrayed in a painting titled, "Akbar hunts wild asses in the desert" composed (*tarh*) and painted (*amal*) by Mahesh and faces (*chihranami*) by kesu, in the Imperial copy of the *Akbarnama*, preserved in the Victoria and Albert Museum, London (I S.2/1896, Acc. No. 84/117).[86]

Shah Jahan shot many wild asses with his guns near Bhira.[87]

Hunting with Dogs :

According to Abul Fazl, Akbar liked this animal very much for his excellent qualities, and imports dogs from all countries. Excellent dogs come from Kabul, especially from the *Hazara* district (north of Rawal Pindi). They even ornament dogs; and give them names. *Shikari* dogs, known as *tazis*, were kept by Akbar and Jahangir to hunt all sorts of animals. Dogs will attack every kind of animals, and more remarkable still, they will attack a tiger. Several also will join and hunt down the enemy. Sometimes they were employed to hunt the deer also. There is one keeper for every two *Tazi* (hunting dogs). *Khasa* dogs

85 . *Akbarnama*, op.cit. Vol. II, pp. 522-23.
86 . Sen, op.cit., pl. 60.
87 . Qazwini, *Badshahnana*, p. 195a.

get daily 2 s of meat; others get 1 ¼ s. The wages of the keepers were 100 *dems* per month.[88]

In the *Akbarnama,* Abul Fazl writes, "one day Akbar was engaged in hunting on the slope of the *safid* sang hills and had put hunting dogs into the charge of his immediate attendants in order that they should lie in wait. And certain men had been sent up the mountain to drive the deer came to the obstacles, the servants had been caught by the dog of carval appetite, and as in their fally they thought only of His Highness's tender years and boyish appearance, they had set themselves toe at and did not slip the dogs in time".[89]

Buffalo Hunt :

At a place where buffaloes sleep, a rope is laid in the ground; but the end forming a loop is left out side. Another long rope is attached to it. To this they tie a female buffalo that wants the male. A courageous active man lies in ambush. As soon as a wild male buffalo comes to the spot, and covers the female, the hunter makes use of the opportunity, and fastens the foot of the male; but it frequently happens that the man loses courage, and has to pay for the attempt with his life.

Another mode of catching them is to go near the ponds which they frequent. They put snares round the ponds; and sitting on tame buffaloes the hunters go into the water with spears in their hands. Some buffaloes are then killed with spears; others are caught in the snares. A similar method may be adopted when buffaloes are attacked in their jungle pastures.[90]

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88 . *Ain-i-Akbari,* op.cit., vol. I, p. 301.
89 . *Akbarnama,* op.cit. vol. II, p. 590.
90 . *Ain-i-Akbari,* op.cit., pp. 304-05.

Siyah-gosh :

Akbar was very fond of using this plucky little animal for hunting purposes. In former times it would attack a hare or a fox, but now it kills black deer. It eats daily 1s of meat. Each has a separate keeper, who gets 100 *dams* per month.[91]

Frogs :

Frogs also may be trained to catch sparrows. This looks very funny. His majesty, from curiosity, likes to see spiders fight and amuses himself in watching the attempts of the flies to escape, their jump, and combats with their enemy.[92]

Duck Shooting :

Jahangir also liked duck shooting. He writes in *Tuzuk*, "I was delighted with the spectacle for a while. On Sunday, the 24th, I halted, and sitting in a boat on a tank which was in front of Royal enclosure (*daulat khana*), were shot ducks (*murghabi*).[93]

Fishing : Fishing was another favourite sport of Jahangir. He writes, "Once he spent three days catching fish by means of "*surya*" nets, which in Hindi was called *bhanwan jal.* "I threw it with my own hands", and caught twelve fishes, and putting pearls into their noses, let them loose in the water.[94]

Again on Sunday, the 3rd *Zilqada*, I employed myself in fishing and 766 fish were caught, these were divided in my presence among the Amirs,

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91 . Ibid., p. 301.
92 . Ibid., p. 308.
93 . *Tuzuk*, Ibid, vol. II, p. 58.
94 . Ibid., vol. I, p. 99.

Ibachkian, and most of the servant. I eat no fish but those that have scales... I have heard from old men, and its has become known to me by experience as well, that fish without scales eat the flesh of dead animals and fish with scales do not eat it.[95]

Hawking :

All the Mughal emperors were fond of hawking. It was a favourite sport with almost all the Mughal emperors. Jahangir held almost all the Mughal emperors. Jahangir held it to be bet of all hunting amusements.[96] Hawks were bought and bred. There was separate department for royal hawk and the employees were mostly Kashmiris and Hindus. "Hawk" was a general term for a bird of prey does not distinguish one species of it from another. Different types of hawks and falcons were kept by the emperors, such as: *baz, shahin, jarran, bahri, small bahri, khailah, chargh, bashah, lagar, jhagar, shikrah, baisarah, turmati, rigi,* and *charghilahs*. The rank of each kind was fixed. They were taught to prey on a flying animal or to catch a water fowlon the surface of water while it swans when a particular falcon caught a bird, *Bakhshish* was give to the *Mir-i-shikar* (master of the hunt). It was distributed among the keepers according to a fixed proportion.[97]

Akbar was very fond of hunting with the *bashahs*.[98] Jahangir liked hawking and catching waterfowl with falcons so much so that he always carried boats with him on his march.[99] The zeal of Shah Jahan to cutch *durna*

95 . Ibid., p. 188.
96 . *Tuzuk*, voi. II, p. 60.
97 . *Ain-i-Akbari*, op.cit. vol. I, pp. 295/96, *Tuzuk*, op.cit. vol. II, pp. 40 & 60.
98 . *Ain-i-Akbari*, opcit., vol. I, p. 215.
99 . *Tuzuk*, op.cit. vol. I, p.3 42; Thomas Roe, *The Embassy of Shir Thomos Roe to the court of the Great Mughal*, Hakluyt Society publication, ed. Willliam Foster, London, 1926, p. 230.

(crane) with *Shahin* is described by Jahangir.[100] Bakhtawar Khan furnishes us with a list of birds of caught by royal falcons in early part of Aurangzeb's reign.

Catching of Water Fowl :

Hunting waterfowl affords much amusement. A rather curious way of catching them is the following. The make an artificial bird of the skin of a waterfowl with the wings, the beak, and the tail on it. Two holes are made in the skin for looking through. The body is hollow. The hunter puts its head into it, and stands in the water up to his neck. He then gets carefully near the birds, and pulls them one after the other below the water. But sometimes they are cunning and fly away. The birds whilst swimming about and to return with them to the boat of the hunter or the hawk will keep a waterfowl down, and sit on it.[101]

Another method is to let water buffaloes go into the water, between which the hunter conceals him, and thus catches the birds.[102]

Durraj Catching :

There are various methods some get a young one and train it till it obeys ever call. It will fight with other birds. They put it into a cage, and place hair nets round about it. At the signal of the put it into an age, and place hair nets round about it. At the signal of the fowler, the bird commences to sing, when

William Hawkins, "*Early travels in India*, ed. William Foster, Oxford, 1921, p.120. Hawkins reports that there were 4,000 hawks in possession of Jahangir.

100 . *Tuzuk*, op.cit. vol. II, p. 60.

101 . *Ain-i-Akbari*, op.cit. vol. I, p. 307.

102 . ibid., p. 307.

wild ones comes near it either from friendship or a desire to fight, and yet entangled in the snares.[103]

Falcon :

Jahangir was a keen falconer and he was indeed familiar with various hawks and falcons as is evident from the accurate observations from his autobiography. Among the most used of the falcons in falconry was the *shaheen* (Falco Peregrinus peregrinator), "king among raptors", resident birds in India, followed by *bahari* (Falco peregrinus calidus), a winter visitor. However, the bird in the picture is red headed and it was identified by Salim Ali as a *Barbary* Falcon (Falco Peregrinus babylonicus), a rare visitor to most of the subcontinent though not so on the western coast in winter. Jahangir appreciated its beauty, and hence the painting. Jahangir writes, "on Sunday, the 18th, we marched. At this time the king of Persia had sent with Pari Beg Mir *shikar* (chief huntsman) one falcon (*shungar*) of good colour. There was another which had been given to the Khan Alam. This one was sent along with the *shahi* falcon (i.e., the one intended for Jahangir), and it died on the road. The *shahi* falcon, too, got maulted by a cat owing to the carelessness of the Mir *shikar*. Thought it was brought to court, it did not live more than a week. What can I write of the beauty and colour of this falcon? There were many beautiful black markings on each wing, and black and sides. As it was something out of the common, I ordered *Ustad* Mansur who has the title of *Nadir-ul-asr* ('Wonder of the Age') to print and preserve its likeness.[104]

103 . Ibid., p. 307.
104 . *Tuzuk*, op.cit. p. 107.

A painting of this bird "Falcon on a bird rest" ascribed to Mansur is known in the Maharaja Sawai Man Singh II Museum, Jaipur (No. AG 824).[105] It is a fine study of a *Barbary* falcon, a comparatively rare visitor to India. This painting is connected with above account of the bird the falcon used for falconry.

Crane Hunt :

Cranes, *Kulang* or *Sarus*, were not all owed to be hunted by anyone within 12 leagues[106], distance of Agra, Delhi and Lahore. The lunx (*Siyah Gosh*) was employed to prey on it. Mannuci writes that "This animal like the cat, approached near the *palk* of the *Kulangs*, and finding itself within the easy approach of the prey, sprang at it. When others flew, the hunters thought their prey was safe.[107] They were also hunted by hawks or *Molchis.*[108] Jahangir writes, "I praise the heart and courage of the falcon", that can sieze such strong bodied animals, and with the strength of kits talons would subdue them.[109]

Catching of other birds :

To catch the bodnas(birds), the hunter makes a claypot with a narrow and, at night time, blows into it, which produces a noise like an owl's cry. The bodnas, frightened by the noise, come together. Another man then lights a bundle of straw, and it about, so that the eyes of the birds get dazzled. The fowlers there upon seize the birds, and put them into cages.[110]

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105 . Verma, op.cit. pl. 2, p. 96.

106 . Abul Fazl writes that, "this plucky little animal.... Formerly hunted fox and hare, but now it kills black deer", it was kept under the charge of a keeper who received 100 dams per mnth.

107 . Manucci, op.cit.,vol. III, pp. 89/90.

108 . Abul Fazl says, "t is an animal resembling a sparrow, of yellow plunage like the shahin.

109 . *Tuzuk*, op.cit. vol. I p. 53, vol. II, p. 60.

110 . *Ain-i-Akbari*, op.cit. vol. I, p. 307.

Lagars resemble *charghs'* it body they are as large *jurras*. They hang nets (about the body of a trained *lagar*) and put birds' feathers into its claws. It is then allowed to fly up. The birds think that it has got hold of prey, and when they get entangled in nets, they commence to fight, and fell to the ground.[111]

Ghaugha fasten together on a cross stick on owl and a *ghaugha*, and have hair nets round about them. The owl will soon get restless, the birds think that the owl wishes to fight and commence to cry out. Other *ghaughas* is and owls will come to their assistance and get entangled in the nets.[112]

Animal Fights :

The fighting between animals of different varieties afforded an important means of popular recreation. Since the common man could not afford to maintain elephants, lions, leopards or tigers, he had to satisfy himself with the less expensive fighting of the goats, rams, cocks, stags, antelopes[113], dogs, birds, bears, buffaloes, bulls and black buck fights[114] were common and the boys generally entertained themselves with bulbul fights.[115]

Cock fighting was a very popular pastime, particularly of the upper middle class. Betting on animal fights was allowed, and the people, in general, often participated in it.

The emperor and the aristocracy entertained themselves with expensive and risky combats between elephants, tigers, deer, leopards, camels, bears,

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111 . Ibid., p. 307.
112 . Ibid., p. 307.
113 . Thevenot, Indian Travels of Thevenot and careri, ed. Surendranath Nath, New Delhi, 1949, p. 53.
114 . Pelsaert, op.cit., p. 51.
115 . Mundy,op.cit., vol. II, p. 128.

bulls, and other wild animals.[116] Akbar was very fond of elephant fight, and sometimes, he personally took parting this sport. He was also interested in deer and camel fights also. Jahangir was also keenly interested in such animal combats. In the *Tuzuk-i-Jahangiri* we find a reference to a dangerous fight between a tiger and a bull.[117]

Hunting, thus appears to have been a very favourite, although expensive, game of the monarch, his nobles, and other aristocratic sections of the society. The Mughals at the time of Jahangir were completely indianized and they enjoyed all types of *shikars* equally and spent a lot on them. There keen interest in *shikar* is unequalled in History. The hunting methods of the Mughals were highly developed and varied. An extensive examination of paintings from each different mode of hunting is beyond expression. The common man also indulged in this practice of hunting like the members of the aristocracy and they were also participated on certain special occasions like the "*qamargah*" hunts as described earlier.

116. Thevenot, op.cit. p. 53, Manucci, op.cit. vol. II, p. 364.
117. *Tuzuk*, op.cit. vol. I, p. 157.

Chapter - 4

Flora and Fauna in Mughal Architecture

FLORA AND FAUNA IN MUGHAL ARCHITECTURE

The human being, by his nature, loves beauty. Even in the earliest times, he used to ornament his tools and implements and decorate the walls of the cave he dwelt in. Necessity was undoubtedly the pre runner, but as soon as his surrounding conditions had stabilized, his sense of beauty his simple sense of the aesthetic set him to make his surroundings more pleasing and more harmonious, with his very meagre resources and puny efforts, man even in the earliest phase of civilization tried to make the world around him as beautiful as possible.[1]

Architecture, born as a science developed into an art. The three necessary requisites of any architecture are its utility, stability, and beauty; that it should serve a purpose, it should be strong and composed of a substantial fabric and should not merely be a structure of the cardboard category; and, above all, the entire structure should appear pleasing.[2]

Flora and fauna was an integral part of Mughal life, being fully represented in the planning of palaces, forts and tombs. A Mughal habitat could rarely be conceived without trees, plants, birds, animals and running water. Mughal architecture does not merely consist of brick, stone and mortar; it attaches equal importance to topography and environment comprising gardens with water courses, water bodies, and open space, etc.[3]

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1. Ram Nath, *Colour Decoration in Mughal Architecture*, 1970, New Delhi, p. 1.
2. Ibid., p. 1.
3. S.P. Verma, *Flora and Fauna in Mughal Art*, Marg, Mumbai, 1999, p. 149.

The depiction of flora and fauna in the architecture was a unique feature of India. Before the Mughals, we often come across to the ancient architecture that the depiction of birds, animals, flowers, trees and many other living beings was alive in the ancient hindu architecture e.g. some animate symbols of the Hindu art were *matsya* (fish), *kurma* (tortoise), *varaha* (boar), *mrga* (deer), *simha* (lion), *asva* (horse), *hastin* (elephant) and *naga* (serpent). Some were mythical motifs as *garuda, hamsa, makara and sardula*. Grotesque creatures and composite animals (*Inamrga*) were also evolved on a large scale. Among the vegetation motifs of the Hindu art *Kalalata, Padma* (*lotus*), *vata, mala, tala* (palm) and *mucakunda* (honey suckle) are most important. Besides these motifs, a large number of symbolic objects conveying philosophical ideas and concepts were also evolved in Hindu art, among which the *purnaghata (Kalasa), Yupa, stupa, cakra* (wheel), *svastika, srivatsa, triratna* and *fankha* (conch-snell) were most popularly used.[4]

With the beginning of the Mughal rule India, a new phase was started in the development of architecture in India. Right from Babur and his successors especially Akbar (r.1556-1605), Shah Jahan (r.1628-58) retained the fundamentals and gradually adapted themselves to the climate, the site, the layout, the garden, and the architecture that is the environment, which became the primary determinant of architectural effect. The palace gardens of Agra, Delhi, Lahore and Kashmir, and above all, the grand tomb gardens of the great Mughals at Delhi, Agra and Lahore, developed from the modest beginnings of

4. Ram Nath, *History of Decorative Art in Mughal Architecture*, Delhi, 1976, p. 3.

Babur. It was in these palaces and tomb gardens that Babur's grandiose dreams found fruition.[5]

A small sunken *Char-bagh* ('four quartered garden') was laid out on the second terrace, namely the *Sahn-i-khas*, to the north of the *Raniwas* or Harem Palace at Fatehpur Sikri (1572-85). It had trees as well as flowering plants. In comparison to this, the palace gardens of Agra Fort and the Red Fort in Delhi – the *Anguri Bagh* and the *Hayat Bakhsh*, which may be assigned to 1630-35 and 1638-48 respectively, are large complex gardens. Both are four-quartered with such architectural elements as raised causeways, canals, lotus ponds, cascades, and mountains. Flower plants were mostly favoured in these gardens. But such small trees and bushes as *champa* (Michelia champaca), *gudhal* (Hibiscus), *kaner* (oleander), *chandni* (Tabernaenaontana coronasia) and *harsingar* (oleaceae) and such creepers as *chameli* (Jasminum pubescens), *juhi* (Jasminum auriculatum), and *malti* (Jasminum grandiflorum) were also grown on the corners and sides. Jahangir also laid out an indoor garden in front of his palace in the Lahore fort.[6]

Independent gardens which were laid out by the Mughals at Agra, Delhi, Lahore, and most abundantly in Kashmir were plain as well as terraced gardens. The purpose of these gardens and lawns was to increase the beauty of the buildings to make them beautiful. The Mughals laid out symmetrically as gardens which such large fruit, flower and leaf trees as *am* (mango), *amaltas* (laburnum), *amla* (myrobalan), *ashok* (saraca indica), *bargad* (Ficus indica),

5. Verma, op.cit., p. 150.
6. Ibid., p. 150.

bel (wood apple), *chenar* (Platanus orientalis), *dhak or palas (*Butea frondosa*),* *gular* (Ficus glomerata), *imli* (tamarind), *jamun* (Eugenia jambolana*), Kachnar* (Bauhinia variegate), *Kadamb* (Anthocephalus cadamba), *Keitha* (Feronia elephantum), *khajur* (date palm), *khirni* (Mimusops indica), *lisora* (Cordia latifolia), *mahua* (Bassia latifolia), *maulsari* (Mimusops elengi), *nim* (margosa), *pipal* (Ficus religiosa), *sal* (Shorea robosta), grown alongside the avenues, and small flowering plants, vines, and creepers such as *chemeli, champa, chandni, gudhal, gulab* (rose), *harsingar, kaner, Ketaki* (screwpine), *malti, mogra* (Jasminum sambac), *nargis* (narcissus), *patli* (srereospermum suaveolens), *rat ki rani* (*Cestrum nocturnum*), and *Surajmukhi* (sunflower) in the partemes. *Kamal* (lotus) and *Kumudini* (waterlily) covered the tanks and completed the spectacle of a paradise.[7]

Along with these floras, fauna also came in existence, in wide variety. Fish, ducks, and swans played in tanks and canals of Mughal gardens. A wide variety of colourful butterflies flittered among the flowering plants. Trees gave shelter to the cuckoo (*koel*), sparrow (*gaureya*), dove (*penduki*), weaverbird (*baya*), lark (*lava*), parrot (*tota*), peacock (*mor*), pigeon (*Kabutar*), crow (*kauva*), and scores of other birds of the region and to squirrel (*gilhari*) and monkeys (*Bandar and langur*). Partridge (*teetar*), rabbits (*kharghosh*), mongoose (*nevla*), and deer (*hiran*) found their habitat in bushes. Separate deer parks were also maintained by Jahangir at Fatehpur Sikri and Lahore.[8]

7. Ibid., p. 150.
8. Ibid., p. 151.

Mughal gardening and horticulture was, in fact, a vast discipline. It was in this beautiful way that nature was tamed and cultured by the Mughals and flora was vitally associated with their architecture.[9]

Flora and fauna in Mughal architecture can be studied not only as its essential part or constituent, but also as a repertoire of motifs and designs used in its ornamentation.[10]

The Mughals used several types of designs for architectural decoration such as arabesques, geometrical patterns, panels of calligraphy and floral motifs, each in a wide variety. Floral designs have been used both in natural and stylized form. While the general inclination of the Mughal artist is to use a floral design in stylized form, and stylization of forms is the dominant theme of Mughal ornamentation, vegetation has also been shown in its natural twists and turns without stylization. In all such cases, it has been depicted as a subject of natural history and not as a work of design. Study of locus, form and purpose of each depiction will decide whether it is a floral subject or merely a floral design for the sake of ornamentation alone. Technically, "flora" must exclude all stylized repetitive floral designs and encompass only natural trees or plants, with trunks, branches, stems, twigs, stalks, leaves, buds and flowers in other words, pure vegetation.[11]

The dados of the *Kutub-khana* (so called Sultana's Palace) of Fatehpur Sikri (1572-85) depict jungle scenes and natural flora and fauna, carved in red sandstone. One panel has three trees with lush vegetation in absolutely natural

9. Ibid., p. 150.
10. Ibid., p. 151.
11. Ibid., p. 151.

form without any stylization.[12] (plate 45) Another depicts a jungle scene with three lions (now mutilated) and five parrots (which too are mutilated but are unmistakably recognizable); two parrots perched on a twig, two on branches of a tree and one shown flying.[13] (plate 46) The upper right hand corner has three beautiful *tchi* (Chinese cloud forms) which suggest that this panel was most probably inspired by miniature painting. It is pure landscape depicting "flora" and "fauna" as a subject, and the dado is unique in this respect.[14]

Two pilasters of this annexe bear pomegranate (*anarkali*) creepers with wonderfully natural twists and turns. The pomegranate is a tree but here it is shown as a creeper to enable it to flow on the mural surface realistically.[15]

Plants in natural forms have been painted on the *mihrab* (niches) of *Jami Masjid*[16] and more prominently, on the dados of Salim Chisti's tomb at Fatehpur Sikri.[17] There is no doubt that these plants have been depicted here on the full panel as a subject. Beautiful natural plants have also been shown on the arches of this tomb.[18] Right since Akbar's reign the Mughal artist was a master of design, of which stylization, partly under Iranian inspiration, was an aesthetic preference. There are only a few instances when he used natural forms of vegetation, against a vast repertoire of stylized floral designs. To this perception *Ustad* Mansur, (*Nadir-ul-Asr)* the court painter of Jahangir, made a world of difference. He sought to depict flora and fauna not as design but as a

12. Ibid., pl. 1, p. 151.
13. Nath, *History of Decorative Art in Mughal Architecture*, op.cit., pl. CIX.
14. Ibid., p. 118.
15. Verma, op.cit., Pl. 3.
16. Ram Nath, *History of Mughal Architecture*, Vol. II, New Delhi, 1985, pl. CXI.
17. Verma, op.cit., pl. 4.
18. Nath, op.cit., pl. CXLVII.

subject, in a natural rather than a stylized way. As Jahangir's memoirs show, Mansur painted a large number of natural history subjects: birds, animals, plants, and flowers. Of the flowers of Kashmir alone, he painted more than one hundred. His paintings had an overwhelming influence on the art of the architectural decorator who was inspired to translate Mansur's studies on the exterior and interior surfaces of the buildings, particularly on the dados.[19]

The predominance of naturalism in Mughal art, in fact, owes a lot to the age of Jahangir. This is perceptible even in the first buildings of his reign – his father's tomb at Sikandara, Agra. The north and south *iwans* (portals) of the main (south) gateway of this tomb have extremely beautiful floral compositions inlaid in mosaic on their facades.[20] (plate 47) Though the flowers which look like lotuses (technically, potentially of the Rosaceae family) and leaves appear to have been used in stylized form, they are spread on the mural surface in an altogether natural way, as if in a pond, adjacently similar to the famous painting of lotus pond of Ajanta where too stylized is totally absent.[21]

Akbar's white marble Cenotaph on the uppermost floor of his tomb depicts lush vegetation on both northern and southern sides. In either case, it is not landscape though it looks like it; it is only a composition of several natural plants with flowers and fruits along with Chinese cloud forms and butterflies.[22] It depicts flora naturally and realistically.[23] (plate 48)

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19. Verma, op.cit., pp. 152-153.
20. Ibid., pl. 5, p. 153.
21. Ibid., p. 153.
22. Nath, *History of Decorative Art in Mughal Architecture,* op.cit., pl. CXVI, p. 120.
23. Ibid., p. 120.

The tomb of Itimad-ud-daula in Agra is probably the most profusely ornamented building of the Mughals constructed entirely of white marble; it has inlay and mosaic designs on the exterior and designs in painting and stucco in the interior. Highly stylized arabesque, geometrical, and floral designs have been used on all external surfaces. Some compositions depict wine cups, wine bottles (*surahis*), and flower vases (*guldasta*)[24] and sometimes the motif of the cypress tree has also been used with them in an altogether stylized form.[25] It is only in the interior that some realistic and natural plants with twigs, leaves and flower have been depicted in stucco and painting.[26] Each plant in its full form appears without stylization.[27] It seems that, taking inspiration form *Ustad* Mansur's plant studies, professional artists were also attempting to draw vegetation in natural form. Similarly, birds like the peacock and animals like the lion in playful postures have also been depicted in the interior.[28]

It must be noted that the objective of the depiction of natural flora and stylized floral design was the same – to create a beautiful situation or composition on a mural pariel for aesthetic pleasure. Soon it was realized that this could be best achieved by using a natural plant motif (a painting by *Ustad* Mansur) in the centre of a dado, bordering it on all sides by a repetitive stylized creeper. The dados of the *Mussamman Burj* in Agra Fort (1628-35) provide some of the earliest examples of this depiction. They have double plant motif, in natural forms, one above the other, carved in the centre in medium relief,

24 . Nath, *History of Mughal Architecture*, op. cit., Vol. III, pp. 414-18.
25 . Ibid. pl. CCXXXVIII.
26 . Ibid., pls. CCXLIX-CCLII.
27 . Nath, *History of Decorative Art*, *op.cit.*, pl. CXLIV, p. 145.
28 . Nath, *History of Mughal Architecture*, op. cit., vol. III, pls. CCLXI-CCLXV.

and a stylized creeper pattern composed of flowers and leaves in inlay in polychrome, on the border.[29] (plate 49) The use of Chinese *tchi* in the upper part of each panel is again indicative of the fact that the original inspiration for this depiction came from contemporary painting. They look like the plant studies of *Ustad* Mansur, and it was probably here, rather than on a *wasli* (mount prepared by pasting two or more papers for painting thereon), that his art has found the best and most representative expression. Several natural plants with stems, twigs, leaves, and flowers have been depicted on each dado.[30]

The dados of the *Diwan-i-khas*, Agra Fort (finished 1636-37), provide later and greatly refined examples of these plant studies.[31] (plate 50) Here the "*tchi*" motif has been dropped. The dados of the *Diwan-i-khas* of Red Fort, Delhi (1639-48), mark another stage of the development of this formula of art. While in the preceding examples of Agra Fort double series of plants one over the other were shown in the centre, here the dados have a single plant each with small "*tchi*" depicted in some cases, like butterflies. They appear here for the last time.[32]

The main impulse to relate Mughal art to the arts of the medici has come from the use of pietre dure inlays in the buildings of Shah Jahan (1628-1658). From its very first appearance in Mughal architecture this particular form of inlay technique belonged although by no means exclusively to the sphere of

29. Nath, *History of Decorative Art*, op.cit., pl. CLVIII, p. 155.
30. Verma,,op.cit., pp. 154-155.
31. Nath, *History of Decorative Art*, op.cit., pl. CLIX, p. 156.
32. Ibid., p. 156.

tomb art. Here it reached its *nadir* in the decoration of the interior of the Taj *Mahal*, in particular on the cenotaphs of the emperor (dated 1666) and his wife (dated 1631). On the main floor and on the marble railing which surrounds them (1642).[33]

About the same time or slightly earlier than the first pietre dure of the Taj Mahal the cenotaph of Shah Jahan's father Jahangir in his tomb at Shahdara near Lahore (ca. 1628-1638) was decorated with inlay work in the same technique. We also find it on cenotaphs of persons of a particular standing such as Asaf Khan, Shah Jahan's father-in-law who died in 1641.[34]

In July 1663 Francois Bernier describes the interior of the Taj *Mahal*: "Everywhere are seen the jasper, the jachen, or jade, as well as other stones similar to those that enrich the walls of the Grand Duke's Chapel at Florence".[35] Jean Baptiste Tavernier, who traveled repeatedly around India between 1640 and 1665, reports that Shah Jahan planned to enrich the hall of public audiences, the *Diwan-i-Aam* of the Red Fort at Delhi, throughout by wonderful works in mosaic, like those in the chapel of the Grand Duke in Italy". But that in the end, the emperor contented himself with a representation of different flowers".[36]

In this passage Tavernier clearly refers to the place of appearance of the emperor in the audience hall, the so-called *jharoka*, which here takes the form

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33. Ebba Koch , *A Mirror of princes; the Mughals and the Medici*, Marg, Bombay, 1987, pls. 2,3,4, pp. 32-33.
34. Ibid., pls. 5-6.
35. Francois Bernier, *Travels in the Mogul Empire A.D. 1656-1668*, ed. A. Constable, rpt. New Delhi, 1972, p. 298.
36. Jean Baptiste Tavernier, *Travels in India*, tr. V. Ball, ed. William Crooke, rpt. New Delhi, 1977, p. 80.

of a throne. In this throne arrangement we find indeed solid evidence for direct interaction between Mughal and Florentine pietre dure because the wall of the niche behind the throne is decorated with 318 Florentine pietre dure plaques showing flowers, birds, lions and a panel of Orpheus playing to the beasts.[37]

It is at the Taj *Mahal*, finally, that dado composition with natural plant motif has been perfected. All the four portals of the main mausoleum have series of dados with plants (composed of twigs, leaves, and flowers with natural twists and turns). Carved in bold relief in the centre in single series and stylized diaper patterns inlaid in polychrome in the border, flowering rhythmically on the flat surface of the panel.[38] (plate 51) The dados of the main (octagonal) cenotaph Hall are unique. The Mughal artist realized that the natural phenomenon in the centre could be best represented by *ghata-pallava* (vase and foliage) motif, depicting a vase or pitcher (*ghata or kumbha*) with overflowing natural vegetation in the centre of the dado, and he used this motif here on these dados most artistically.[39] (plate 52)

The unique development of this art was only possible in India where the *ghata-pallava* had been used symbolically, auspiciously, and ornamentally, both as subject and as design, for about two thousand years, as at Mathura and Amaravati. This inspiration to use it as a subject in Mughal architecture could have been taken from the extent temples and also from the medieval architecture of Gujarat where the *ghata pallava* was prominently used in niches of the *minars* for example, on the *minar* of Qutub-din's mosque at Ahmadabad.

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37. Koch, op.cit., pl. 12, p. 39.
38. Nath, *History of Decorative Art*, op.cit., pl. CLX, p. 156.
39. Ibid., pl. CLXI, p. 156.

Mughal artists used it earlier on incised stucco painting in the vestibule of Akbar's tomb and on the bases of the *Diwan-i-khas* pillars in the Agra fort. The *ghata-pallava (purna kumbha* or *purna kalasha*) motif of the Taj *Mahal* is the most distinctively symbolic of flora used in Mughal architecture. After this, stylization takes over and stylized floral designs almost completely replace the earlier natural forms.[40]

Reference in this connection may also be made to the honeysuckle (*muchkund*) and palmette (*talparna, taldhwaj, talketu,* or *padmahaslak*) which provide the best examples of stylized florals in Indian art. These have been used in ancient Indian art on the *torana* (gateway) of Bharhut, the abacus of the Ashokan pillar of Sanchi, elephant and bull capitals at Sankisa, and Rampurva, respectively, singly or together in a beautiful ornamental composition.[41]

Honeysuckle and knop-and flower motifs have been used in Akbar's buildings at Agra Fort (1565-75) and *Fatehpur Sikri* (1572-85). The parapet of the eastern court of the so-called *Jahangiri Mahal* complex of the *Bengali Mahal* in Agra Fort is decorated with a honeysuckle design. The pillars and pilasters of its porch have palmette motifs on their bases. The interior decoration of the upper pavellions of this palace is also composed of a honeysuckle and palmette design. At Fatehpur Sikri honeysuckle is depicted on the apex of a number of ornamental arches in the *Mahal-i-Ilahi* (the so called Birbal's Palace) and also in designs on the mural panels. It is used as well the capital of a pillar in the *Panch Mahal.* Some capitals of this palace also have

40. Verma, op.cit., p. 158.
41. Nath, *History of Decorative Art*, op.cit., p. 85.

knop and flower. The honey suckle and palmette motif has been used most prominently on the bases of the red stone pillars of the *Rang Mahal* and white marble pillars of the tomb of Sheikh Salim Chishti, which were added by Qutub-Din Khan Kokaltash (Khuban) during the reign of Jahangir, around 1605-07. All of them are carved.[42]

The third story spandrels of the arches of Akbar's tomb at Sikandra (1605-12) have, in a number of cases, such medallions which contain the honeysuckle motif. The *chhatri* (pavilion) pillars of the fourth storey have the palmette motif on the bases, also in carved stone. It is noteworthy that it was mostly during the age of Akbar, or contiguous to it, that these designs were used. Soon, the Mughal court artist ingeniously developed his own designs (geometricals, arabesques, and stylized florals) and these extraneous motifs were gradually forgotten.[43]

In such a discipline as Mughal architecture, all animation is not fauna. Brackets which have elephant heads (in the eastern *dalan* (*verandah*) of the Delhi *Darwazah* of Agra Fort); of those which spring from makara-heads or elephant heads (in the northern hall of the *Jahangiri Mahal* annexe of the *Bengali Mahal*, Agra Fort and Central hall of the so-called *Ankh Muchoni* at *Fatehpur Sikri*); or those which are peacock shaped (in the Mayura mandapa of the *Bengali Mahal* in Agra Fort), Swan shaped (in the *Bagh-i-Nur Afshan* at Agra), or elephant shaped (in Jahangir's palace in the Lahore Fort), for example, are architectural elements pure and simple. Similarly, rows of swans,

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42 . Ibid., p. 86.
43 . Verma, op.cit., p. 159.

parrots, elephants, and other birds and beasts depicted on friezes, in stone carving in the buildings of Akbar and Jahangir are pure designs, which have not been used as a subject, but for the sake of mural ornamentation only. As in the case of flora, such depictions do not constitute "fauna", in the real sense of the term.[44]

Landscapes and wild animals have been depicted on the dados of the *Kutub-khanah* at Fatehpur Sikri, as has been discussed above. Most important, however, is the depiction of "fauna" in natural surroundings on the picture wall of the Lahore Fort (1612-20) in glazed tilling. A large number of panels show such fauna scenes as lion hunting deer, lions reclining, camel, elephant, horse, deer, and other animals in beautiful landscape, in hunting and other postures. This is a unique series obviously; it could only have been commissioned by such an ardent naturalist as Jahangir who loved nature in its pristine purity. His artist, as has been referred to above, painted both "flora" and "fauna" in their natural forms, not as designs but as subjects of the respective miniatures, and a large number of glazed titled panels of the picture wall also depict them accurately. Jahangir's time was in fact, an age of 'flora' and 'fauna'.[45]

It must be noted that there is practically no animation, or depiction of 'fauna' in the white marble buildings of Shah Jahan – for example, in his palatial mansions in the Agra Fort (1628-38), the Red Fort (1638-45), the Taj *Mahal* (1631-48), and in the *Moti Masjid* in Agra Fort (1648-54). It is only in the red stone buildings of Akbar and Jahangir that recourse to animation was

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44. Ibid., p. 159.
45. Ibid., p. 159.

taken through several means and "fauna" was freely depicted. An orthodox point of view seems to have prevailed thereafter and animation was excluded from the scheme of Mughal architectural decoration.[46]

It is clear that, Mughal art is not a vehicle of any religion, as is the tradition India Art Hindu, Buddhist, Jaina, Rajasthani and Pahari art in them in general, for instance, "flora" and "fauna" appear as celestial being and as a terrestrial phenomena, prescribed to be depicted on three terraces (technically, *bhadrapithas*) of the *samavasarana*, following the Indian concept of *meru* or *someru*, symbolized the cosmos *(jagat)*. Mughal art was art for the sake of beauty and grandeur, without philosophical, religious, or ritualistic symbolism. It requisitioned both "flora" and "fauna" only to the extent that these could be used for artistic embellishment, to enhance the architectural effect. The Mughal art which thus developed in the hands of the indigenous builder was mainly a court art depending on the connoisseurship and individual patronage of the emperor or the noble, so unlike classical Indian art, which the art of the people is at large and in common. Mughal art is essentially non-sectarian if not purely secular.[47] Mughal art is manifestly a departure from the classical India art; the former strikingly featured the naturalism or at least a naturalistic intention.

46 . Ibid., p. 159.
47 . Nath, *History of Decorative Art*, op.cit., p. 6.

Chapter - 5

Gardens in Mughal India

GARDENS IN MUGHAL INDIA

Hindustan, a land full of flora and fauna has attracted to the Mughals. When Babur came to India (1526) he saw a number of forests, mountains, deserts, rivers, animals, trees and plants, etc. He was very much impressed with the natural beauty of this country[1]. Similarly Babur found that it is a country of various seasons, e.g., rainy, winter, springs and summer, etc. These seasons and the climate of Hindustan was favourable for the forests and gardens.[2] So Babur and other Mughals laid out many gardens for various, i.e., for the beautification of the palaces, for the purpose of rest and as well as for the environmental purposes. The idea of these gardens was very much influenced from Persian pattern and based on paradise.[3] Most of the gardens were laid by the Mughal rulers, officials and nobles. But Indian love of gardens infact began centuries earlier. It is evinced from the Hindu epics, particularly descriptions related to the royal palaces, temples, which were built near springs and running water. Artificial water courses, terraces, and partrecces were yet to come but beautiful natural gardens of indigenous trees of the forest and river banks are described at the sites of temples and pilgrim shrines. Illustrations of such forest scenes are included in manuscripts produced for Hindu patrons who remained relatively independent of Mughal rule. These illustrations are in Indian style, almost untouched by Islamic and Mughal influences.[4]

The spread of Islam extended to India from the 13th century, and the Ganges plain was dominated by Islamic rulers who, almost certainly for the

1 Babur, *Baburnama*, tr. A.S.Beveridge, Vol. II, New Delhi, 1985, p. 484.
2 Ibid., p. 515.
3 Ram Nath, *History of Mughal Architecture*, Vol. I, New Delhi,1982 p. 94.
4 Norah Titley and Frances Wood, *Oriental Gardens*, London,1991 p. 46.

first time introduced the *chahar-bagh* (four path gardens) system taken from Iran. In the 16th and 17th centuries this plan reintroduced by Babur, was expanded in Mughal gardens. Early 16th century illustrations produced at the studios of the so called sultanate rulers, who had introduced, traditions of book production from Iran exhibit strong Persian characteristics of style, while depicting plants, trees, and flowers alien to Iran but abundant in India, such as the Banyan, *pipal*, mango, plantain, and lotus, etc.[5]

Gardens were an integral part of Mughal life and culture and constituted an important part of the city planning. The Mughal garden (the *chahar-bagh*)) was introduced in India by Babur were generally laid out on a grid pattern and generally followed a pattern: a square or a rectangular area divided into four quadrants (or multiples there of) by two axes comprising the water channels and pathways (the *Khiyabans*). Depending on the area to be enclosed, the quadrant could be divided and sub-divided to create the same module on different scales. At the points of intersections, water tanks (*hauz*) and platforms were built. In the centre was either a large *hauz* or a *baradari* (4 pavilions with three pillared opening on each side).[6]

These gardens could either be laid out as orchards (bustain) or flower gardens (*gulistan*). From the point of view of their purpose, they could be further categorized as (a) Pleasure gardens; (b) Temporary camping ground of the emperors; (c) *Khawabgah* or house gardens; and (d) funerary gardens.[7] It is also important to note that these gardens were generally situated on the

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5 Ibid., p. 46.

6 Sylvia Crowe, Sheila Haywood & Susan Jellicoe, *The Gardens of Mughal India*, London, 1972, pp. 44, 56.

7 S. Ali Nadeem Rezavi, Exploring the Mughal Gardens at Fatehpur Sikri, *Proceedings of the Indian History Congress*, Banglore session, pp. 894-95.

outskirts of the towns; some were also laid out inside the city proper.[8] Thus when Babur conquered Agra he ordered the construction of a large number of gardens around the city.[9] Most of the these gardens, viz., Aram *Bagh*, *Bagh-i-Hasht-Bihisht*, *Bagh-i-Dahra*, *Bagh-i-Zahara*, the two latter being for his daughters, and these were built on the periphery of the city and through them an attempt was made to transform the layout of the environment. Thus Pelsaert, writing about the city of Agra during the reign of Jahangir asserts that 'the luxuriance of the groves all round makes it resemble a royal park rather than a city.[10] Bernier who visited this city during the subsequent reign also has almost the same opinion when he remarks, 'a large expanse of luxuriant gardens form a part of the city of Agra.'[11]

These gardens were such an integral part of the Mughal culture and a toll of city planning and landscaping according to the sources they served for their enjoyment while in life, and even 'after death' as a setting for their tombs and mausoleums.[12] Apart from all these, the gardens also provided the rulers a considerable space for the large assemblies of armed followers. For this we have such specific references from the reign of Jahangir. For example at one place Jahangir writes in his memoirs that, "I remained three days in the garden, and on the 27th Isfandiyar entered the city".[13]

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8 Ibid., p. 96.

9 Catherine.B. Asher, *Architecture of Mughal India*, Cambridge, 1992, p.22

10 Fransisco. Pelsaert, *The Remonstrate or Jahangir's India*, tr. W.H. Moreland & P. Geyl, New Delhi, 1972, p. 5.

11 Francisco, Bernier, *Travels in the Mogal Empire (1656-1668 A.D.)* ed. A constable, New Delhi, 1972, p. 294.

12 Pelsaert, op. cit., p. 5.

13 Jahangir, *Tuzuk-i-Jahangiri*, tr. A Rogers, ed. H Beveridge, Vol. I, Delhi, 1978, p. 234.

Babur was familiar with the gardens created by his ancestors at Samarkand and Herat which had been laid out by Timur's sons and grandsons. These gardens, designed in the *chaha- bagh* system, were the main influence on those he himself created, particularly at Kabul and later in India. He writes of nine gardens at Samarkand, including the *Dilkusha* (Heart's delight) with its avenue of white poplars leading to the Turquoise gate. During a visit to Heart in 1506, Babur mentions, amongst others, the white Garden and describes its summer house ('joy house') as a sweet like abode built in two storeys.[14]

This shows Babur's abiding interests in the creation of gardens wherever he went. A true gardener throughout his life, whether traveling or at the time of the campaign, he observed the local flowers, plants and trees, made entries about them, as well as reported on the progress of his own gardens, in the diaries he kept so assiduously.[15]

Babur came to Agra soon after the battle of Panipat in May 1526. It was the hottest season and he was much tortured by scorching heat, hot winds (known locally as *loo*) and dust. He took recourse to the provision of running water and gardening which could cool down the atmosphere and give relief, as much as they could provide a beautiful landscape.[16] Babur writes, "one of the great defects of Hindustan being its lack of running water, it kept coming to my mind that waters should be made to flow by means of wheels erected wherever I might settle down, also that grounds should be laid out in an orderly and symmetrical way. With this object in view we crossed the Jun-water (river

14 Titley, op.cit., p. 47.
15 Ibid., p. 47.
16 Nath, op. cit., p. 86.

Jamuna) to look at garden grounds for few days after entering Agra. Those grounds were so bad and unattractive that we traversed them with a hundred disgusts and repulsions. So ugly and displeasing were they that the idea of making a *chahar-bagh* in them passed from wind, but needs must! As there was no other land near Agra that same ground was taken in hand a few days later. The beginning was made with the large well from which water comes for the Hot-bath, and also with the piece of ground where the tamarind tree and the octagonal tank are. After that came the large tank with its enclosure, after that the tank and '*talar*' (probably *dalan*) in front of the outer residence; after that the private house with its garden and various dwellings, after plots of garden were seen laid out with order and symmetry, with suitable borders and parterres in every corner, and in every border rose and narcissus in perfect arrangements".[17]

As a matter of fact, Babur was in search of a hillside spring around which he could lay symmetrical terraced gardens with water softly rippling from one terrace to the other in a series of water falls. Instead of the hillside, he came across the level ground on the bank of the river Jamuna at Agra where he intended to lay garden.[18] Babur inherited this idea of a terraced garden from Persian tradition. Garden craft was a favourite art in Persia and the references can be traced systematically as far back as to the Sasanian period even if we set aside the fabulous hanging gardens of Babylon and terraced gardens of Persepolis. Gardening received greatest impetus in the Muslim period. Caliphs immensely favoured it.[19]

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17 *Baburnama,*op.cit., p., 531
18 Nath, op. cit., p. 87
19 Ibid., p. 87

The Persian garden almost as a rule was enclosed. The plan of this garden was worked out in a regular arrangement of four squares often subdivided into smaller plots, with a lily pond (or lotus pool) or pleasure pavilion in the centre. This was called the *char-bagh* or *Chahar-bagh* (four quartered) plan. Four shallow canals run at right angles from the central pool to the middle of the four sides. Flower parterres and cypress-avenues bordered these canals. The Persians adored the cypress and plane (*Chenar*) trees. The cypress was the most evergreen tree and was an ancient symbol of immortality and it frequently occurs in Persian art. Plane is liked for its cool and refreshing shade.[20]

Persian garden, as pointed out earlier is essentially a terraced garden-a garden in descending stages, with the life giving water as one of the principal adornments as well as the very life and soul, the raison d'etre of the garden itself. In terraced gardens the central channel would be so arranged that the water would fall gently from level to level or else race down cascades and waterfalls, activating a series of fountains on the way. Water was manipulated beautifully in canals, jets of water, water falls, cascades, ponds and lakes. Canals and tanks were so constructed as to keep the water brining to the level of the paths on either side. Each terrace had a *char-bagh* or four quartered plan with paved paths, flower beds, cypress-avenues and other ornamental features.[21]

While the gardens of Samarkand also reflect the impact of the Persian tradition. The architects who planned these gardens came, almost invariably,

20 Ibid., p. 88
21 Ibid., p. 88

from Iran. River Zar-Afshan and numerous other channels and streams supplied ample water in and around Samarqand for gardening.[22] Babur was fully conversant with these traditions of gardening. He conquered Samarqand a number of times and he has mentioned its beautiful gardens, e.g., the Perfect Garden, Heart Delighting Garden, Garden of the plain, *chahar-bagh* of Dervish Muhammad, Terkhan and others, in his memoirs. Similarly the gardens which he founded at Kabul were *Bagh-i-Banafsha* (Garden of violets), *Bagh-i-Padshahi* (the Imperial Garden) and *Bagh-i-Chenar* (The Garden of Plane trees), *Bagh-i-Wafa* (The Garden of fidelity), etc.[23] (plate 53)

At Agra, he devoted much time in laying gardens and setting water devices, than reorganizing his revenues and the administrative system which, infact, needed greater attention. To call him 'The Prince of Gardens' would not, therefore, be an exaggeration.[24] The cypress represented eternity to the Mughals and bordered the walks and water channels of their gardens. Orange and citron were also favoured for these borders, pomegranates, almonds, and date palms were in the plots. The fruit were not mixed, for different species required varying amounts of water and care. Beneath the groves of trees, masses of spring-flowering plants iris, daffodils and narcissus-were preferred. In some later gardens, flowerbeds were occasionally planted with a single variety massed in a pattern that created a mosaic-like effect. Many hybridized roses were cultivated, and jasmine was a favourite, especially in the strongly scented moonlight gardens.[25]

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22 Ibid., p. 88
23 *Ibid.*, p. 89
24 Ibid., p. 90
25 E.B. Moynihan, *Paradise as a Garden: In Persia and Mughal India*,.New York, 1984, p. 101.

The Mughal emperors had a great fondness for fruits for some it was practically an obsession- and they spared no efforts to ensure that fresh fruit was brought to them from all parts of their empire. They introduced many new varieties to India; fruit trees from northern valleys-even those beyond Kabul were transplanted to the perched plains.[26] Babur himself wrote in his memoirs: "The people of Hind who had never seen grounds planned so symmetrically and thus laid out, called the side of the Jun where (our) residences were, Kabul".[27]

Gardeners and men with special skills such as in grafting trees, were brought from Persia and the north to tend these gardens and train local workers. In his memoirs, Babur recalls his pleasure when a Gardner from Balkh (now in Afghanistan) successfully raised melons in his Agra garden. Always experimenting with plants and introducing new cutting, Babur has earlier planted vines there, which he felt bore very good grapes.[28]

Not just interested in the fruits, Babur also collected unusual flowers as he writes, "Rahim-dad has planted a great number of flowers in his garden (*Baghcha*), many being beautiful red oleanders. In these places the oleander flower is peach; those of Gwalior are beautiful, deep red. I took some of them to Agra and had them planted in gardens there."[29]

Babur's favourite garden was the one that he created at Kabul, known as the *Bagh-i-Wafa* (Garden-of-Fidelity). He writes, "In 914 A.H. (1508-09 AD) I laid out the four quarter garden, known as the *Bagh-i-Wafa* on a rising ground,

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26 Ibid., p. 101
27 *Baburnama,* op.cit., p. 532
28 Moynihan, op. cit., p. 103.
29 *Baburnama,* op. cit., p. 610.

facing south.... There oranges, citrons and pomegranates grow in abundance....I had plantains brought and planted there; they did very well. The year before, I had Sugarcane planted there; it also did well. The garden lies high, has running water close at hand, and a wild winter climate. In the south west of it there is a reservoir 10 by 10, round which are orange trees and a few pomegranates, the whole encircled by a trefoil meadow. This is the best part of the garden, a most beautiful garden sight when the oranges take colour. Truly that garden is admirably situated.[30] The late 16th century artist depicting the garden has followed Babur's description very carefully, illustrating the plants mentioned and the water flowing into the channels that form the *chahar-bagh*.

The illustrated manuscript of this garden is preserved in National Museum, New Delhi (f. 270). It is titled as "*Bagh-i-Wafa*" garden layed by Babur in Adinapur". On the top of the painting Koh-safed, the snow covered mountain and a Persian wheel for lifting water. Below is the *Char-bagh* divided into four plots in which oranges are growing in bulk. A plantain and two cypresses grow in one of the plots. A keora plant is in plot on the top right. In the reservoir in the centre a pair of ducks is gamboling. A solitary gardener is digging the soil in the plot to the left.[31] (plate 54) Another garden laid by Babur, also near Kabul, was at Istalife, one of the villages in the fertile fruit growing area near the Paghwan mountains. Babur writes, "Masses of grapes ripen in their vineyards and they grow every sort of fruit in at abundance.... There is a pleasant halting place outside it, under great planes, green, shady and beautiful. A one will stream, having trees on both banks, flows constantly

30 Ibid., p. 208

31 M.S. Randhawa, *Paintings of Baburnama*, National Museum, New Delhi,1983, pl.15

through the middle of the garden', formerly its course was zig-zag and irregular; I had it made straight and orderly; so the place become very beautiful..... A group of planes gives pleasant shade above it; Holm oak (quercus bilut) grows in masses on the slope at its sides, these two out lands (Biluchistan) excepted, no Holm oak grown in the mountains of western Kabul – and the Judas tree (*arghawan*) is much cultivated in front of it, that is towards the level ground, cultivated there and nowhere else...... The yellow *arghawan* grows plentifully there also, the red and the yellow flowering at the same time.[32]

In all, he created ten gardens in and around Kabul, in addition to the one he designed for his future burial ground. This tomb garden was restored and extended by his great grandson, Shah Jahan who commented in his chronicles on the magnificence of some plane trees originally planted at Kabul by Babur.

Eventually Babur designed his first garden in India at Agra, reputedly the Aram *bagh* or (now Ram *bagh*), still there today but considerably altered. The probability however is that the real site is that of the Ram *bagh*, originally the Aram *bagh* or 'Garden of Rest' also known as the *Nur Afshan* garden. It is almost certainly the earliest Mughal garden to survive in recognizable form.[33] It is situated on the left (eastern) bank of river Jamuna, between the *Buland-Bagh* and the *Chini Ka Rauza*. Babur gave this garden the pleasing name of '*Bagh-i-Gulafshan'* (The flower-scattered Garden).[34] It could indeed be described as 'orderly and symmetrical'. The basic pattern is one of geometrically laid-out

32 *Baburnama*, op. cit., pp. 216-17
33 Crowe, op. cit., p. 63.
34 Nath, op.cit, p. 91.

walks, with platforms raised well above ground level from which to view the garden. A terrace follows the east bank of the Jamuna, and on it are the remains of two substantial buildings while the water channels throughout are seen in their earliest and purest form, mere runnels to irrigate the roots of trees.[35] Babur's description of the first garden he laid out on the banks of the Jamuna river is a classic of the transformation of an unfavourable site. The lack of water channels and of gardens initially deterred Babur when he surveyed possible sites near Agra. He was so discouraged that he abandoned his original idea of making a *chahar bagh* there, only to change his mind when nothing better than the ground "So bad and unattractive we traversed them with a hundred disgusts and repulsions".[36]

Babur planted various plants, trees and flowers in this garden. Furthermore, Babur imported plants into India, and a melon grower from Balkh (then in Iran), a city renowned for melons. Babur has mentioned in his Memoirs about the beauty of flora and fauna of Hindustan. The plants and the trees which he saw motivated him to create these pleasant gardens in Hindustan. He listed and described trees and plants such as mango, banana, oranges, myrobalan, jackfruit, monkeyjack, oleander, hibiscus, banyan, *pipal* and many others. The fruit has two pleasant qualities, one that it peels easily, the other that it has neither stone nor fibre'). This became a reason which created ful-interest for the creation of gardens in the mind of Babur. These fruit trees are depicted in an Illustrated Imperial Mughal manuscripts (Or .3714, f. 4040).[37]

35 Crowe, op.cit., pp. 64-65.
36 Titley, op. cit., p. 52.
37 Ibid., p.33.

The garden was evidently well maintained during his Jahangir's reign, who writes, "On this day I went round to see the Garden of *Gul-i-Afshan* which is on the banks of the Jamuna on the way rain fell heavily and filled the meads with freshness and greenness, pineapples had arrived at projection, and I made a thorough inspection. Of the buildings that overlooked the river, none that I saw were without the charm of verderer and flowing water".[38]

Another Mughal Paradise Garden, such as the Lotus garden at Dholpur, thirty five miles south of Agra, was within a day trip of the capital or fort, and were enjoyed in much the same manner as western rulers enjoyed their country houses or retreats. That any of these secular paradise Gardens have survived the vicissitudes of the time is due in good part to the excellence of their planning and construction.[39]

Babur died at the end of 1530 and was buried in his garden at Kabul. He was succeeded by Humayun who did not inherit his love of gardens .Humayun died in 1556 as the result of an accident before he had designed his own tomb or chosen a site for it. It was a tradition that the choice of a site, the tomb itself and the design of the gardens surrounding it, were usually begun by the future occupant in his own life time. Humayun's widow Haji Begum built the complex at Delhi and it was completed in 1573. Humanyun's tomb is a remarkable example of that contrast of red sandstone and white marble which was to become a vogue of the time. The gardens surrounding it are one of the very few Mughal gardens to survive in the original Persia-inspired *chahar bagh* form and they laid out in a series of *chahar bagh* plans.[40] The partresses are

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38 *Tuzuk*, op. cit. p.143

39 Moynihan, op. cit.,p. 100

40 Titley, op. cit., p. 54.

divided in by wide paths which have narrow water channels running down the centre. They are arranged on low terraces to provide gravity for a steady flow of water. Later Mughal garden landscape designers developed the water channels on a far larger scale until they resembled canals. They were also constructed on different levels but with deeper terracing, the water flowing from level to level down chutes, cascades and waterfalls.[41]

Akbar, the greatest of the Mughal emperors, succeeded Humayun 1556 when he was only 13, and reigned until his death in 1605. He was a man of wide interests, although garden landscaping was not such an outstanding passion as it had been for Babur. However, he appreciated Babur's skill and paid tribute to him, noting that he had enhanced India by landscape gardening, wide avenues and falling water. It is due to Akbar's patronage of the arts and of book production that manuscripts copied from the late 16th century at his atelier included the memoirs of Babur which were illustrated with miniatures of superb quality by the imperial artists. Miniatures that include Mughal gardens as subjects or as backgrounds provide invaluable insights for besides the layout, they also include details such as plants and trees, oxen working the water wheels to draw water from wells, gardeners : tools and they clay contains for keeping tree roots watered.[42]

Chronicles kept by Akbar's officials of the events of his daily life and of State affairs included numerous inventories as well as lists of indigenous trees, plants and flowers with description of their characteristics. Akbar had gardens laid out around the buildings of his new city, Fatehpur Sikri and the Fort at

41 Ibid., p. 54.
42 Ibid., p. 54

Agra.[43] The former, a city of palaces and gardens, was built at the shrine of Sheikh Salim. Akbar was the first Mughal who entered the Kashmir valley. He conquered Kashmir in 1586, in all, Akbar visited Kashmir three times. He seems especially to have enjoyed the autumn colour and the Saffron fields, and visited the spring at Achabal. He was entranced by the setting of Lake Dal, with its back drop of mountains, and by the wild flowers which carpeted the meadows in spring.[44] He built a palace, at Srinagar, *Nasim bagh*, which was surrounded by gardens. This was the first in the long series of beautiful terraced gardens of the Mughals in the valley. The garden rose just over the Dal lake and with its usual avenues, pathways, tanks, cascades and other water-devices, it must have been a novel composition in its original form.[45] Akbar's tomb at Sikandara, on the plains near Agra, was begun in his own life time and completed by his son, Jahangir. It was surrounded by gardens laid out in the *chahar bagh* style, each section divided into four parts divided by raised paths, everyone with a central water channel. Fountains, tanks and water falls were supplied by wells and water flowed into tanks which were used for irrigating the fruit trees, flower beds, and avenues. The most important thing was that Akbar liked blackbucks very much which he kept during his time. The tradition of keeping blackbuck inside the lawns of Akbar's tomb a Sikandara is still maintained. The size of this tomb and garden is shown in a huge 19th century drawing which indicates the extent of the gardens, and their country yards, channels, pools, fountains and trees. A magnificent tree in a clay irrigation

43 Ibid., p. 54
44 Crowe, op. cit., p. 80
45 Nath, op. cit, Vol. II, p. 275

container used to keep its roots watered, from the poems of Nizam.[46]Jahangir was also greatly interested in gardens and it was during his and his successor's reign that the Mughal garden developed to perfection and some of the world famous gardens were laid out. Jahangir gave special attention to gardens in the valley south of Srinagar. He loved the natural streams and springs, and so added to them canals, fountains and buildings to create terraced gardens.

Garden constituted infact, an integral part of the Mughal life and culture, whenever they traveled and Jahangir traveled a lot, they lived in camps but when they reached towns, they preferred to stay in gardens amidst pleasing surroundings. Jahangir was a naturalist and he immensely loved the beautiful things of nature, both fauna and flora which, at times, he commissioned his artist to paint. He repaired, renovated and sometimes renamed the old gardens which were scattered throughout the Empire and also founded new ones and built garden pavilion in them.[47]

The gardens of the reign of Jahangir can be divided in four distinct classes (a) tomb gardens (b) palace gardens (c) plain gardens (d) terraced gardens. The gardens of Kashmir, *Bagh-i-Nur Afshan* of Agra and the Jahanara garden of Kabul belong to this group.[48]

Like Babur, Jahangir was attracted by the splendor of the mountains and the charms of the lakes, landscaping of gardens and love of flowers.[49] Kashmir was to remain the area he loved most from the time he accompanied Akbar

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46 Titley, op.cit., p. 36.

47 Catherine B. Asher, The New Cambridge History of India Architecture of Mughal India, New *Delhi, 1995*, p. *124*.

48 Nath, op. cit. Vol. III, p. 231

49 Ibid., p. 231

there.[50] He traveled to Kabul, to see Babur's gardens there, and saw no less then seven in one day, and he was supported in his interest by his wife, Nur Jahan, and his brother-in-law Asaf Khan. As both of them, designed beautiful garden there.[51] The long period, they spent in Kashmir the magnificent gardens Shalimar, Nishat, Vernag, Achaval were created. In addition, a series of palaces and buildings with gardens were built at the various stopping places, including Sialkot and Rajauri on the road from Agra to Kashmir, as the emperors would be accompanied by a large entourage of courtiers, soldiers and servants, as well as members of their own families.[52] He writes in his memoirs: "If one were to take to praise Kashmir, whole books would have to be written.[53] He observed and noted everything and found the water melons and pears of the best kind, the garlic good. He rated the fish inferior and the wine sour. The pomegranates not worth much, the guavas middling but the apricots cooled rival Kabul's.[54] According to Jahangir cherry and apricot trees were brought to Kashmir from Kabul by Akbar. Not unexpectedly, when he rebuilt Akbar's fort garden he included cherry trees. When four of these trees produced a crop of 1,500 delicious cherries, he gave them whimsical names and "strictly ordered the officials of Kashmir to plant *Shah-alu* (cherry) trees in all the gardens.[55]

In the cool altitude of Kashmir, 5200 feet, apples and plums were substituted for the usual orange and citron trees bordering the paths. White,

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50 Moynihan, op. cit., p. 121
51 Crowe, op. cit, p. 93.
52 Titley, op. cit, p. 1.
53 *Tuzuk*, op. cit, Vol. II, p. 143
54 Moynihan, op.cit. p. 121.
55 *Tuzuk*, op. cit, p. 162

purple and mauve iris was a favourite floral combination and lilac the favourite shrub.[56]

Jahangir continually rhapsodized about the valley: Kashmir is a garden of eternal spring.... A delightful flowerbed and a heart expanding heritage for dervishes. Its pleasant meads and enchanting cascades are beyond all description. There are running streams and fountains beyond count. Wherever the eye reaches there are verdure and running water."[57] He writes about 'mead after mead of flowers. Sweet smelling plants of narcissus, violet and strange flowers."[58] Included among the latter was the crown imperial lily which was unfamiliar to Jahangir and which, subsequently, was often included amongst the flower paintings decorating the borders of album and manuscript pages. 'The flowers of Kashmir are beyond counting and calculation."[59] At another place he describes the beauty of the salting and lists some of the flowers and fruit. In the spring the hill and plains are filled with blossoms. Tulips everywhere, almond and peach, chambili (white jasmine) and valve jasmine, apricots, lilies, pears, apples, guavas, grapes pomegranates, water melons, mulberry, cherries."[60]

The most promising garden of Kashmir is Shalimar, it was laid out by Jahangir and perfected by Shah Jahan., Bernier, who thought it the most beautiful of all the gardens, he writes, "The most admirable of all these gardens is that of the King, which is called Chahlimar, from the lake, one enters into it by a great canal, bordered with great green Turfs. This canal is above five

56 Moynihan, op. cit, p. 122
57 *Tuzuk*, op.cit., p. 143.
58 Ibid., p. 144
59 Ibid., p. 145
60 Ibid., Vol. I, p. 185

hundred common paces long, and runs twixt two large allies of poplars: It leadgth to a great cabinet in the midst of the garden...... There are also from space to space, great rounds of water serving for store house, whence many Jets of water, variously figured, do spring up: And this canal ends at another, great cabinet which is almost like the first."[61] Shalimar was the most secluded and celebrated of Dal Lake gardens.

Another garden is Achabal a remote garden built by Jahangir at the southern end of the valley, shaded by beautiful old *chenars*. The water gushes from a spring with such force and cascades into the pools with such power that it creates a very lively atmosphere in the garden originally, an underground channel was necessary to carry off the excess water; In Achabal the water changes character on the same plane by moving from pool to canal to pool; the usual design is varied because the pools are longer than the connecting watercourse.[62]

When Jahangir encamped at the fountain of Achabal. He obsereved the water on this spring is more plentiful than that of the other (Vernag) and it has a fine water fall. Around it lofty plane trees and graceful white poplars, bringing their heads together, have made enchanting places to sit in. 'As far as one could see, in a beautiful garden, *Jafari* (Tagetes patula) flowers had bloomed. So that one might say it was a peace of paradise.[63]

The garden at Vernag, about 40 miles south of Kashmir is notable for the large pool fed by springs of the purest water. Jahangir found it full of fishes

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61 Bernier, op. cit. p. 135
62 Moynihan, op. cit., p. 127
63 *Tuzuk*, op. cit., vol. II, p. 87

when visited in 1620-21. Jahangir writes, "On Wednesday, the 1st of Minar, marching from Achabal, I pitched camp near the fountain of Vernag.....When I was a prince I had given an order that they should erect a building at this spring suitable to the place. It was now completed.... Of the trimness of the canal and the verdure of the grass that grew below the fountain what can one write and various sorts of plants and sweet smelling herbs grew there in profusion, and among them was seen a stem (*buta*), which had exactly the appearance of the variegated tail of a peacock. It waved about in the ripple, and bore flowers here and there. In short, in the whole of Kashmir there is no sight of such beauty and enchanting character.... I gave an order that plane tree should be planted on both sides, of the banks of the canal above mentioned."[64]

Water flows under the arches of the surrounding arcade and eventually into the river Jhelum by way of a 12 feet wide canal. In Ottoman, Turkey lamps and candles were used in gardens to eminence the beauty of the flowers but in Mughal gardens in India they were placed behind water to create a sparkling effect as waterfalls flowed over them. Holders for lamps and candles were built into niches in the brick work and can still be seen in the 16th century Ram *bagh* gardens at Agra. While succeeding Mughal emperors employed them in niches of cascades, water falls and pavilions. Buildings round the pool at Vernag were introduced by Jahangir in 1609. It was at Vernag that Jahangir and Nur Jahan spent much of their time and it was his unfulfilled wish to be buried there.[65]

Nishat *Bagh* the garden of Gladness, one of the non royal gardens on Lake Dal, is also the largest and most spectacular.[66] It was a far more ambitious

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64 *Ibid.*, p. 92

65 Titley, Op. cit, p. 58

66 Crowe, op. cit, p. 113.

scheme than Vernag. Entered from below, it provides a superb vista, its outstanding feature being a central canal constructed on a series of terraces down which water flows from one level to the next by means of cascades and water falls into the lake below. Rows of fountains are placed down the centre of each pool on every level. The central terraced pools are flanked by flower beds and the whole garden surrounded by shady plane trees. On some levels a dais or seat was constructed over the water just above the chute. The cascade bordered by flower gardens at Nishat.[67]

The garden was built in 1640, and was used for only fifty years before being abandoned. It was called *Pari Mahal,* or Fairy House, by the local people, who were afraid to visit the site because they believed it to be haunted and because they feared snakes on the mountainside.

The ruin of *Pari Mahal* is romantically outlined against the sky from the garden of *Chasma Shahi,* a small garden built in 1632-1633. In the main pavilion, there is a rare treatment of water, beneath the open watercourse, which flows through the pavilion, runs a second channel, water from the top channel flows into a five feet square pool and some returns through the lower, hidden channel to the main watercourse; thus it recirculates. The overflow from the pool descends to the lower terrace by an exceptionally long, about eighteen feet, but narrows *Chaddar.*[68]

Shah Jahan, appears to have been more interested in architecture than horticulture, and added buildings to existing gardens including a black marble

67 Titley, op. cit., pl. 43.
68 Moynihan, op. cit, p. 128

pavilion in the Shalimar.[69] Shah Jahan had a lifelong interest in the construction of superbly well ordered gardens many of these served as the setting for major structural works, for example the tomb of Mumtaz *Mahal*, better known today as the Taj *Mahal*. Palaces also incorporated gardens into their layout, other gardens, however, were developed independently of tombs and palaces.[70] Magnificent buildings dating from his reign included palaces with extensive gardens at Delhi, Lahore and Agra as well as the most famous of all, the Taj Mahal. Following the Mughal tradition it stands in extensive grounds, although these gardens have been altered considerably over the years. The original plan of the garden was conventional, with fountains placed at intervals down the central channel and a large raised pool with a cusped and the trefoil border providing wonderful reflections of the building. Water channels at right angles to the main canal divide the garden into the traditional *Chahar Bagh* scheme. Begun in 1632, it was completed in 1648 and an unusual feature, is the positioning of the tomb buildings at the end of the gardens, thus providing an exquisite vista of channels, fountains and reflections unlike the long terraced central channel of the Nishat *Bagh* in Kashmir, which is made spectacular by its series of waterfalls and cascades, the Taj *Mahal* Channel relies on fountains supplied by a sophisticated system of water pipes. The flower beds were planted with roses, tulips, crown imperials, apples and guavas shady trees. Such as banyan, plane, cypress, jackfruit and *pipal*, and sweet scented shrubs including jasmine, *champa*, oleander and screw pine were widely grown. The flower theme continues in the decorations of semiprecious stones inlaid in the

69 Titley, op. cit, p. 61.
70 Asher, op. cit, p. 206.

marble of the tomb in the form of sprays, flowers and trees while the outer walls are decorated with flowers in bas-relief.[71]

Laying to the north-west of ShahJahanabad, close by the Grand Trunk road near Badli Sarai, was once yet another great pleasure garden, comparable to those of the same name at Lahore, and Srinagar. It was laid out by one of Shah Jahan's favourite wives, A'Azzu-un-Nisa, and evidently the Shalimar *Bagh* in Kashmir had been her inspiration. Its remains are recorded in a plan showing a garden of considerable size, its main feature being a central canal about eighteen feet wide, which ran the full length of the garden. According to a contemporary historian, Muhammad Salih, it was originally even larger.[72]

The upper terrace stood some nine feet above the lower, and at the change of level was a complex of tanks and buildings, with rows of pearl showering fountains', and marvelously adorned halls.[73]

The Shalimar garden at Lahore was laid out by Ali Mardan Khan, on Shah Jahan's instructions. The first great undertaking had been the construction of a canal to bring the waters of the Ravi river up to the gardens in Lahore. By 1633 the canal was ready and Shah Jahan celebrated its completion by giving instructions for the creation of a garden on a grand scale, with tanks and fountains, a bath house and several pavilions. About 1642 the work was complete and he paid the garden a ceremonial visit, after consultations with his astrologers as to an auspicious date.[74]

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71 Titley, op. cit, p. 61.
72 Crowe, op. cit. p. 143
73 Ibid, p. 148
74 Ibid., p. 148

The concept introduced in the Nishat *Bagh*, of a pavilion at the far end of a long vista, viewed from below and dominated by a main water channel with waterfalls. Chutes and cascades were reversed during Aurangzeb's reign. He succeeded in 1658 and like Shah Jahan, was mainly interested in architecture but unlike his predecessor, did not create large gardens to accompany his buildings. One who did, however, was his chief architect, Fiday Khan, who designed a superb garden at Pinjaur where he was governor. In contrast to the Nishat *Bagh*, the entrance was positioned above the highest terrace, and although planned in the usual way, with a central terraced canal, when it was viewed from above it made nothing like the impact of the Nishat *Bagh* vista seen from below.[75]

This way, Babur introduced the Persian garden traditions in India and introduced them as marvelously as he could. The garden craft as he founded in India was based on the fundamental principle, of planning of some pleasure pavilion, residential palace or tomb in harmonious relation to the water devices-canals, tanks, water chutes, and fountains-and in equally harmonious relation to the tree avenues and flower beds.

75 Titley, op. cit p. 62

Chapter - 6

Herbs and Medicinal Plants

HERBS AND MEDICINAL PLANTS

India has always been a land of natural plantation. The topography or the geographical condition and its climatic changes have been very favourable for the growth of the plants and trees which are great sources of herbs and medicines. On the other hand the Indian soil, water resources, rain and other natural occurrences provided much stronger environment for the growth of natural plants in India. A considerable number of plants species have been identified and many of these were used in the form of medicine by the Indian people right from ancient times onwards.

This is a known fact that during the time of Mughals the herbs and plants were used in the form of medicine to cure various diseases. We have many references which prove that the herbs and plants were used much before the Mughal rule in India. The plants of medicinal value were also described in Atharvaveda, while tradition of two medicinal works namely *susruta* and *charak samhita* appeared in Arabic by the ninth century.[1] Similarly during Delhi Sultanate Firoz Shah Tughluq is said to have had a comprehensive work on medicine, the Tibb-i-Firozshahi which was compiled under his personal supervision. He also established a hospital (*daru'sh shifa'*), where the common people were treated. Firoz, in fact, adapted quite a moderate approach by gathering mentally ill patients and having them detained in the hospital for treatment. Barni mentions Ayurvedic practitioners at Delhi in early fourteenth century, such as "Mah Chandra, the physician" and "Magoris Brahmans, and

1. B. V. Subbarayappa, 'Medicine and Life Sciences in India', *History of Science, Philosophy and Culture in Indian Civilization,* PHISPC, Vol. IV, Part II, p. 608

Jayatis (Jains)" Sultan Mahmud Khilji also built a hospital at Mandu (Malwa) in 1442-43.[2]

Similarly during the Mughal period Ayurvedic medicines had long been recognized as a parallel and effective system. It seems that there was a tendency to regard European medicine too in similar light. Danishmand Khan, the scholarly noble of Shahjahan and Aurangzeb, employed Francois Bernier at Delhi (1659-66), and the latter explained to him at length Harvey's discovery of the circulation of blood, and Jean Racquet's discovery of the conversion of chyle into blood.

In the same way, the 16th and 17th centuries in India appear to be a period of interactions between the Indian and European systems of medicine. It was the period when a number of European 'physicians' visited India. An example can be given of Francois Bernier, Niccolao Manucci, Garcia da O'rta, John Ovington, John Fryer, Hemilton and Linschoten who not only wrote extensively on medical practices of India but also revealed the knowledge which was known and practiced by them. They also wrote about the climate and conditions of people during the period of their stay. It should, however, not be forgotten that many of these 'European physicians' who came to India were self-taught and learned and not exactly 'men of medicine'.[3] A case in point can be Niccolao Manucci, who himself admitted his limited knowledge of the medical science. They came to India attracted by the new opportunities which India offered. However these European 'physicians' have left behind their

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2. Irfan Habib, *Medieval India, The Study of a Civilization*, N.B.I., New Delhi, 2008, p. 76, see also for medicine during medieval India, p. 200
3. Rajesh Kochhar, 'The Truth Behind the Legend: European Doctors in Pre-Colonial India', *Journal of Biosciences*, September, Vol. 24, No. 3, 1999, pp. 259-268.

comments which help us to get a better understanding of the medical knowledge as it was known and practiced in India and they gave full information about the herbs and medicinal plants which they had seen, during their stay in India, and their uses for the cure of various diseases.

Niccolao Manucci was convinced that the *tabibs* had no knowledge of medicine and were definitely not in position to cure the stone. Paralysis, Apoplexy (Epilepsy), Dropsy, Anemia, Malignant fevers or other difficult complaints and Indian physicians 'cured hot complaints with cooling remedies'.[4]

Jan Hugghen van Linschoten, the Dutch traveler of sixteenth century, sailed from Spain to Goa and 1596, the account which he left in his, the Itineratio of Voyage of Jan Hugghen Van Linschoten to east of Portuguese Indies. He speaks very favourably of the Indian physicians and says they made no distinction in treating the Indian and Europeans alike.[5] According to him the Portuguese hospital (the kings hospital) at Goa was reserved for the portguese while the "Indians have a hospital by themselves".[6]

Linschoten mentions various diseases like fever, cholera, dysentery etc. and says that Garcia de orta was the first European who described the disease i.e. cholera in 1563.[7] This disease was quite common and Portuguese had no remedies for it, while the Indian physicians were able to cure it by herbs,

4. Manucci, Niccolao, *Storia do Mugor or Mughal India (1653-1708)*, tr. William Irvine, Calcutta, 1996 (Reprint), vol. II. p. 333.
5. Cf. Jaggi, O.P., op.cit., pp. 76-77.
6. Linschoten, J.H.V., *The Voyage of East Indies*, ed. Arthur Coke Burnell, Asian Educational Society, New Delhi, 1988, vol. I, p. 230.
7. Ibid., p. 237.

sunders, other ointments.[8] The bloody "flixe" (dysentery) was common and very dangerous.[9] Mentioning cholera he writes:

In the field of medicine we have much information contained in our sources. Linschoten in his survey has identified many plants and disease, and stones also. He mentions about *Indian Figge* (in Sanskrit call it 'Keli') which he calls 'Paradise apple'. The Indian physicians, he says, do use this fruit as medicine for fever and other diseases.[10] Pepper a medicinal plant is good for a cold maw, the Nucken (Freakishness), the pain in the liver, and the dropsy.[11] Cinnamon was used for the colic and other diseases proceeding of cold, it was also a good cure for foul smelling. The water and oil of cinnamon on the other hand, he says, was helpful for all the inward parts as head, heart, maw and liver.[12] Ginger according to Linschoten is useful to a man to go easily to the stool and good against humurs 'that darkens the eyes' and is used in many medicines.[13] Clove he mentions strengthens the liver, the maw, the heart and procure evacuation of the urine.[14] Nutmeg, on the other hand sharpens the memory, warms and strengths the maw and drive down urine, stops the diarrhea and is good against all common colds.[15] Maccis is especially good for a cold and weak maw, it also procures digestion of the meat.[16] Cardamom is very good against a foul smelling and evil humors. It is supposed to be eaten with betel, to purge the head and maw of slime.[17] Amer cured the sick and was

8. Ibid., pp. 235-36.
9. Ibid., p. 236.
10. Ibid., pp. 235-236.
11. Ibid., vol. II, pp. 40-42.
12. Ibid., p. 75.
13. Ibid., pp. 76-78.
14. Ibid., pp. 78-80.
15. Ibid., pp. 83-84.
16. Ibid., p. 86.
17. Ibid., p. 86 in Hindi called 'Javatri'.

especially good for recuperating mothers' old men and for every cold complication.[18] Alimi scar (Muske) cleaned the white spots of the eyes: it comforted the head and the cold arches.[19] Benion because of the sweet smell comforted the heart, the head and the brain.[20] Mirre was used in medicines for cold coughs; 'laskes and bloody flixes'.[21] Mannan eased and moistened the harshness of the throat, the breasts and stomach.[22] Sanders were of three sorts, i.e. white, yellow, and red. The white and yellow were used against the hot pains in the head: they were good against hot fever and also used to strengthening the heart, therefore used as a cardiac medicine.[23] Snake wood found mostly in the island of Ceylon was specially used against the sting of the snake. It was also used to kill rats and mice.[24] Lignum aloes, which in India was called Calamba, is good for stinking breath and is used to strengthen the liver.[25] He also mentions the Root China which was used in India to cure the poxes. The poxes were a common disease in India. The root China called Guaiacum in India was according to Linschoten not only good for piles and pocks but also for cramps and all cold diseases. It resisted evil humours and strengthened the liver. Its heated water was used for 'dropsy, filthie, ulcer, scurffes, and leprie'.[26] Camphor is also mentioned by him as a medicine.[27] Linschoten further says that tamarinio grows in most parts of India and Indians call it 'ambilii'. The physicians use it in purgation and medicines compounded

18. Ibid., pp. 86-88.
19. Ibid., p. 94, Amber in Arabic called Ambar and in Latin 'Ambarium'.
20. Ibid., p. 95.
21. Ibid., pp. 96-97.
22. Ibid., pp. 100, 'Mirve' in Hindi called 'Loban'.
23. Ibid., p. 101.
24. Ibid., pp. 102-103.
25. Ibid., p. 104.
26. Ibid., pp. 105-107.
27. Ibid., pp. 107-112.

with other herbs. The Turks and Egyptians also used it for hot diseases and fevers.[28] Microbalances according to him were also found in many places of India. They purge the stomach from choler and are good against tertian and hot burning fever.[29]

Aloe, by the Arabians called Sebar, by the Decaners Area, by the Camarijns cate, comer, and by the Portingales Azeure, is made of the Tuyce of an Herb, when it is dried, the Herb is called by the Portingales Herba baboza, that is Quil herb.[30] Aloe pure the stomach from choler, and tough fleagme, specially (a water and weak stomach), it took away all stopping and consume the rawe moistures, preserving from foulenesse: besides this, it strengthen the stomach, it is made stronger by adding to it cinnamon, Mace, or Nutmeg. Aloe is good specially against Kooren and rawness, and for such persons as have their stomach full of raw moisture, it is also used outwardly against sores (that break forth of the body) and for the eyes.[31]

The fruit called Anacardi, is in many place of India, as in cananor, Calicut, and the Deccan, and indiverse other places. The Arabians call it Balador, the Indians Bibo, and the Portugale Faua de Malacca, that in Beans of Malacca, because it is like a beans, but somewhat greater than the beans of these countries, they are used in India with milk, against a short breath, for the wormes and for many other things.[32]

This fruits hath her name from the heart, because in colour and likenesse, it resembles the heart, specially being dry. The same operation that is

28. Ibid., pp. 117-118.
29. Ibid., pp. 119-122.
30. Ibid., pp. 123-125.
31. Ibid., p. 126.
32. Ibid., p. 127.

in prepared Mirobalans, is also in them, they heat and drie, they strengthen are memory, the brains and sinews, sharpen the wits and are good against cold infections of the head.[33]

The calamo Aromatico called in Gusurate viz. in Deccan vache, in Malabar vasabu, in Malacca Daringoo, in Persia Heger, in Cuncan (which is the country of Goa and there abouts Northwards) vaycan, and in many places of India, as in Goa, the country of Gusurate and Balaghat, where it is sowed and so growth, it hath so smell at all, until it be gathered. The women use it much in India, for the mother, also for pain in the sinews, it is also much used for horses, for when it is cold weather, they give it horses in the morning to eat, being beaten and mixed with garlic cumin seeds, salt, sugar and butter. The receipt they call Arata, which is always used in India, for horses, wherewith (as they says) they do them great good.[34]

Costus which the Arabians call cost or cast, the Gusurates of Cambaia, and they of Malacca Pucho, whether it is much brought and also into China and other places. I have many kinds of costus, the Indian, described by Garcius with all her tokens. The Arabian and Syrian with her right mark, and also an other sort, much like ginger. The Indian costus is the best of them all, it health, drive down the urine and the stone. It is good against the byting of snakes, pain the breast, and the worms.[35]

Cubebus so called by the Arabians, and also Quabes, by all the other Indians cubachini, or Cubachini, Cubebus is a fruit like pepper, about the same

33. Ibid., p. 127.
34. Ibid., pp. 127-28.
35. Ibid., p. 128.

bigness, the best are such as are close, full, heavy and sharp, although less then Pepper, somewhat bitter and smell well, in a manner sweet. They warme and comfort the stomock, which is weak by reason of superfluous or windie matter, they cleanse the breast from tough fleagme, they strengthen the tailt, breake winde, and help cold diseases of the mother, being chawed, with masticke, they cleanse, the brains of fleagm and strengthen them.[36]

The leaves called Folium Indum, which the Indians call Tamalapatra, are like orange leaves, but somewhat sharper and of a dark green colour. They have a sweet smell, almost like cloves. This is good to provoke urine and against a stincking breath: also they lay them between their apparel, cloths and linen, for it keep them from worms, and say it serve in all things as spiconardi doth.[37] Similar information is provided to us by the 'Indian' physicians. Hakim Kamala Khan in his Risalardar Khwasut-adwiyas-i-hindiyan 18th century, for example he mentioned some Indian herbs and mendicaments.[38] Maulvi Hakim Yahya Nudrat in his treaties Manazirul Abdul of 19th century described the properties and peculiarities of various medicinal herbs and flowers.[39] Spices like cumin, cinnamon, pepper etc. were valued for their warming qualities while te a and coffee were considered aids to digestion such medicines were in common use in Europe.[40]

Information is also available on 'medicinal stones'. Linschoten for example describes precious stone and their medicinal use. Alakecca is called as blood stone

36 . Ibid., p. 129.
37. Ibid., 130
38 . Ibid., pp. 131-32.
39 A. Rahman, M.A. Alvi et al. (ed.), *Science and Technology in Medieval India – A bibliography of source Material in Sanskrit, Arabic and Persian*, New Delhi, 1982, p. 118.
40 . Ibid., p. 135.

because is quickly stanched blood. Milk stone was good for lactating women. Emerald and lubie stones were used in medicine and drugs.[41] Some Indian medicines were thought to have almost magical properties. The Fabled Bezoar (snake, stone), was used for curing snake bites.[42] Do orta says that a concoction of the benzoar ground with treade cured the Portuguese Bishop of cholera Orta believed that the stone had a Persian origin, the name being derived from Persian *pad-zahar*, or antidote to poison.[43] Bezoar was also mentioned later by European travelers like Thevenot. Inayat Khan gives an account of the Bazoar stone's successful employment against a pestilence which swept the Emperor's court in 1654.[44] Tavernier in his account also mentioned Bazoar stone but did not describe its medicinal properties probably as he was not well versed in anatomy.[45] The stone was also reputed to be a specific remedy for fever, plague, skin diseases, and a host of other acute and chronic ailments.[46]

Thus, we see these were the herbs and medicinal plants which were commonly used in India. The European travelers discussed in detail about these plants and properties and their uses for medical purposes. While discussing the India's herbs and medicines especially of the Mughal period, we come to notice that interaction between Indians and Europeans played a very significant role in this field.

41. Cf. Patti & Harrison, *Health, Medicine and Empire: Perspective of colonial India*, New Delhi, 2001, p. 48.
42. Linschoten, vol. II, op.cit., p. 141.
43. Cf. Patti & Harrison, op.cit., p. 47.
44. Inayat Khan, *ShahJahannama: An Abridged History of the Mughal Empire*, tr. A.R. Fuller, W.E. Begley & Z. A. Desai, New Delhi, 1990, p. 309
45. J.B.Tavernier, *Travels in India*, Tr. V. Ball and ed. William Crooke, Vol. II, pp. 115
46. Patti & Harrison, op. cit., p. 47

Chapter - 7

Animals in Captivity : Management, Treatment and Breeding

ANIMALS IN CAPTIVITY – MANAGEMENT, TREATMENT AND BREEDING

The animals and birds had been very dear and near to the Mughal emperors, particularly to Akbar and Jahangir. Both the emperors maintained a number of birds and animals for various experiments like hunting, entertainment, domestication and side by side to produce new races through breeding. For these purposes Akbar and Jahangir organized a strong management system of these birds and animals.

Management :

The Mughal emperors from Babur to Aurangzeb were very fond of hunting. Babur and Jahangir on their own way were naturalists and Akbar was also passionately found of animals. They kept the animals and birds for various purposes. Akbar and Jahangir maintained a big aviary and royal menagerie, carried out observations, tests and experiments. The emperor Akbar often ordered a specimen to be dissected in his presence, kept records for ascertaining long range phenomena on the basis of measurements and weights. During the reign of Akbar the animals were brought from outside of India. Abul Fazl mentions in *Ain-i-Akbari* that various types of animals had been brought from Persia, Turkistan and Kashmir for the purpose of game and many other engagements.[1]

According to Bernier the inmates of the menagerie were led under the royal window, where the monarch sat every day about noon. This procession

1. Abul Fazl, *Ain-i-Akbari*, tr. H. Blochmann, vol. I, New Delhi, 1977-78, p. 248.

was commenced with the horses and elephants. Similarly a number of different types of animals were kept, like antelopes for the purpose of fighting with each other, *Nilgai* or grey oxen which appeared to be a species of elk, rhinoceros, large Bengal buffaloes with prodigious horns that enable them to contend against lions and tigers, tame *cheetah* or panthers were employed in hunting and even some of the fine sporting dogs from Uzbekistan were also kept. Apart from all these animals a number of hunting birds of different species, falcon etc., were used in the field sports for catching partridges, cranes, hares and even it is said for hunting antelopes on which they pounced with violence, that these birds also show their resistance by beating the heads of these animals and also blinding them with their wings and claws.[2] These entire phenomenon show the purpose for which the animals were kept and a wonderful system of management was applied by Akbar and Jahangir.

Jahangir's interest in the animals and birds is well represented in his *Tuzuk-i-Jahangiri* which tells us his feelings about the birds and animals, his interest in nature's beauty, his fondness to manage these animals and birds and even his expression towards the ugly looking animal. Nevertheless, his descriptions are precise enough to make possible the correct scientific identification of the objects described. But his nature proves that he possessed the qualities of a naturalist, environmentalist and a good manager of the nature and creatures. Furthermore, the local names and habitat of the animals described by him, geographical names and the description of their physical

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2. Francois Bernier, *Travels in the Mogul Empire, AD 1656-1668*, tr. A. Constable, re., V.A. Smith, New Delhi, 1983, p. 115.

characteristics, weights and measurements, besides interesting notes on ecology and animal behaviour show his management expertise of wildlife.[3]

During the Mughal period, particularly the reign of Akbar and his son Jahangir a number of animals like elephant, *cheetah*, horses, camels, dogs, deer, mules and cows were kept under a management system for various purposes like, hunting, fighting, domestication, breeding, for war and amusement etc. Apart from these wild and domestic animals a number of birds like falcon, hawks, water-fowl, *saras* (crane) and many others were kept for various purposes. A number of experiments regarding breeding, entertainment, fighting and behaviour were done during this period. This management system was highly organized and a number of servants were employed to look after these animals and birds. There was a unique system to manage these animals and birds of various types, therefore a systematic study of the management of each animal and bird is necessary.

This is human tendency that before liking or managing any thing he finds certain qualities in that. It was also true in case of the Mughal management system of these animals and birds. There may be a number of qualities in each and every creature like elephant which enabled the Mughal emperors to keep it under a significant management system. The elephant being a symbol of royalty was a very important animal for the Mughals. Abul Fazl mentions that the elephant is a wonderful and strong animal which possesses the structure of a mountain and courage of a lion. He wrote that this is a legendary animal used by the kings for reflecting pomp and show and was

3. M.A. Alvi and A. Rahman, *Jahangir the Naturalist*, New Delhi, 1968, p. 5.

greatly used in the battle. It is said that a good elephant possesses the power of five hundred horses and people also believe that elephant guided by a few bold men-armed with matchlocks is worth double that number. Abul Fazl writes that an elephant never hurts the female, though she is a cause of his captivity, he never fights with young elephants nor does he think it proper to punish them. Similarly having a great sense he does not harm his keeper nor throw dust over his body when he is mounted, though he often does so at other times.[4]

There are a number of habits and qualities of an elephant which has been written by Abul Fazl. The elephant can be taught various feats. He learns to remember such melodies as can only be remembered by people acquainted with music, he can move his limbs to keep pace of time with music and exhibits his skill in various ways. He can shoot off an arrow from a bow, discharge a matchlock and can learn to pickup things that have been dropped and hand them over to the keeper. Sometimes the elephants get grain to eat wrapped up in hay; this they hide inside of their mouth, and give it back to the keepers, when they are alone with them. The teats of a female elephant, and the womb, resemble those of a woman. The tongue is round like a parrot and the testicles are not visible. Elephants frequently take water with their trunks and sprinkle themselves with it. Such water has no offensive smell. They also takeout of their stomach grass on the second day, without its having undergone any change.[5]

The Emperor divided the elephants under special categories for the sake of their management. So, there were four kinds of elephants which have been

4. *Ain-i-Akbari*, op.cit., vol. I, p. 123.
5. Ibid., p. 124.

described widely by Abul Fazl. (1) ***Bhaddar*** **elephant**: It was well proportioned, having an erect head, a broad chest, large ears and a long tail. This kind of elephant was bold enough and could bear fatigue. It was called in Hindi as Gaj Manik because of its forehead which resembled like a large pearl. Many other properties were ascribed to it. **(2)** ***Mand***: This elephant was of black colour and its eyes were yellow. It had a long penis and a uniformly sized belly but it was wild in nature, it was hard to deal with this elephant because it was ungovernable. **(3)** ***Mirg*** : This elephant had a whitish skin with black spots : the colour of its eyes was a mixture of red, yellow, black and white. **(4)** ***Mir*** : It had a small head and was obedient by nature or obeys readily. One more thing was its change of behaviour and frightened when there was thunder. Inspite of these differences of the four categories of the elephants a number of other names and properties were there. The colour of skin was threefold, white, black and grey. Again it becomes more understood, by the threefold division of the dispositions assigned by the Hindus to the mind, namely, *sat*-benevolence, *raj*-love, sensual enjoyment and tam-irascibility. On this basis three categories of the elephants were in this manner. First such in which *sat* predominates. They were well proportioned, good looking, ate moderately, were very submissive, did not care for intercourse with the female, and lived to a very old age. Secondly, such in whose disposition '*raj*' prevailed. They were savage-looking, proud, bold, ungovernable and voracious. Lastly were full of '*tam*'. They were self-willed, destructive and given to sleep and voraciousness.[6]

Abul Fazl described about the sensitivity and intelligence of the elephants. Referring to some interesting incident, he writes that "I have heard

6. Ibid., p. 125.

the following story from his majesty", "once a wild young one had fallen into a pit. As night had approached, we did not care to pull it out immediately, and left it, but when we came next morning near the place, we saw that some wild elephants had filled the pit with broken logs and grass, and thus pulled out the young one". "Again, once a female elephant played us a trick. She feigned to be dead. We passed her, and went onwards, but when at night we returned, we saw no trace left to her". There is also another story "there was once an elephant in the imperial stable named *Ayoz*. For some reason it had got offended with the driver, and was forever watching for an opportunity. Once at night, it found him asleep. It got hold of a long piece of wood, managed to pull off with it the man's turban, and seized him by the hair and tore him asunder". So these incidents show their sensitivity which had been noticed by his majesty. These reasons made the Mughal emperor to take strong measures to maintain or to manage the system regarding the captivity of the elephants.[7]

Emperor Akbar made a sevenfold division of the elephants, based upon experience: 1. *Mast* (full blood); 2. *Shergir* (tiger-seizing); 3. *Manjhola* (middle most), 5. *Karha*, 6. *Phandurkiya*, 7. *Mokal*. The first class comprised of young elephants, possessing peculiar heat which rendered the animal so strong. The second class contained likewise once or twice had given the signs of perfection and exhibited an uninterrupted alacrity. The third class comprehends useful elephants, which were nearly as good as the preceding. The fourth class contained elephants of a somewhat inferior value. Those of the fifth class were

7. Ibid., p. 124.

younger than those of the fourth. The elephants of sixth class were smaller than those of the fifth. The last class contained all young ones still unfit for use.[8]

There were special arrangements of food which was provided to the elephants according to the category, capacity, age and size of the elephants. Each class was divided into three subdivisions, viz., large sized, middle, and young ones; the last class contained ten kinds. A certain quantity of food was fixed for each class. Previously the elephants were not categorized that is why a large quantity of food and fodder was wasted upon them. But when Akbar noticed this, he inquired into this matter and issued wise regulations for guidance to provide food properly.[9]

Since Akbar had been very fond of this animal and collected it in a large number, he appointed many elephant-keepers to look after them. A proper rank was assigned in such a manner as he had proper knowledge of the animal. The servants of the elephant stables were divided according to their seven divisions, and a *Mahawant* was assigned to each elephant.[10]

It was very interesting to maintain and to keep these elephants properly. A number of equipments were there for the maintenance of these elephants. We have information of a considerable number of these equipments.[11]

Another important animal under the Mughal management was the *Cheetah*. Akbar also caught *cheetahs* by training them out, which was very interesting phenomenon. This animal was also brought under captivity and

8. Ibid., p. 131.
9. Ibid., p. 132.
10. Ibid., p.133
11. Ibid., pp.134-136 (for details see appendix Management System of Animals and Birds in Mughal India)

management system. *Cheetah* was a very important animal for hunting a deer. It was caught by many methods. In former times people managed to train a newly caught leopard for the chase in the space of three months, or if they exerted themselves, in two months. Abul Fazl writes that from the attention which Akbar paid to this animal, *cheetahs* were now trained in an excellent manner in the short space of eighteen days. Old and active keepers were surprised at such results, and extolled the charm of Akbar's knowledge. From good motives, and from a desire to add splendour to his court.

A rather remarkable case was the following. Once a *cheetah* had been caught, and without previous training, on a mere hint by Akbar, it was brought in the prey like trained *cheetahs*. Those who were present had their eyes opened to truth, and experienced the blessing of prostrating themselves in the belief on Akbar.[12]

Attracted by the wonderful influence of the loving heart of Akbar, a *cheetah* once followed the imperial suite without collar or chain, and like a sensible human being, obeyed every command so Akbar and at every *cheetah* chase enjoyed it very much to have its skill brought to the test. There were two hundred keepers in charge of the *khasa cheetahs*. A proper system of training had been laid down.

It is very interesting that like all the arrangements of the elephants, the emperor tried to keep the *cheetahs* and provided food to them properly.[13]

There were four men appointed to train and look after each *cheetah*, but now there were three men told off for such *cheetahs* as used to sit on horses,

12. Ibid., p. 296.
13. Ibid., pp. 297-98

when taken to the hunting ground, and only two for such as sit on carts and on *dolies.*[14]

Unlike other animals the emperor paid special attention for the management and upkeep of the horses. It is a well known fact that the horse has always been a legendary animal throughout the human and animal history. So, Akbar was very fond of horses, because he believed them to be of great importance in the three branches of the government, and for expeditions of conquest. He saw in them a means of avoiding much inconvenience.[15]

Merchants always brought to court good horses from Iraq-i-Arab and Iraq-i-Ajam, from Turkey, Turkestan, Badakhshan, Shirwan, Qirghiz, Thibet, Kashmir and other countries – Droves after droves arrived from Turan and Iran, and at that time there were twelve thousand horses in the Emperor's stable[16]

Akbar, from the light of his insight and wisdom, made himself acquainted with the minutest details, and with the classification and the condition of every kind of article, he always looked to the requirements of the times, and designed proper regulations. Hence he also paid much attention to everything that was connected with this animal, which was of so great importance for the government and an almost supernatural means for the attainment of personal greatness. The Emperor made categories of the horses to make their management more convenient.

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14. Ibid. p.300 (for details see appendix also)
15. Ibid., p. 140.
16. Ibid., p. 140.

There were two classes of horses – (1) *Khasa*, (2) those were not *khasa*. The *khasa* horses were the following – six stables, each containing forty choice horses of Arabia and Persia, the stables of the princes, the stables of Turkish courier horses, the stables of horses bred in Imperial studs. They had each a name, but did not exceed the number thirty. Emperor Akbar used to ride upon horses of these six stables.[17]

The second class horses were of three kinds, i.e., *si-aspi, bist-aspi, dah-aspi* which belonged to the stables of the thirty, twenty and ten. A horse, whose value came up to ten *Muhars*, was kept in a *Dah-muhri* stable, those worth from eleven to twenty *muhurs,* in *Bist-muhri* stable, and so on.[18]

Grandees and other *Mansabdars*, and senior *Ahadis* were in charge of the stables. Hay and crushed grain were found by the government for all horses, except the horse which the *yataqdar* (guard) of every stable was allowed to ride, and which he maintained in grain and grass at his own expense.

The considerable quantity of food was given to the horses accordingly. *A khasa* horse was formerly allowed eight *sers* fodder per diem, when the ser weighed twenty eight dams and after that the ser was fixed at thirty dams now a *khasa* horse got seven and a half *sers*.[19]

There were a number of articles and ornaments used for these horses. It is difficult to describe the various ornaments, jewels, and trappings, used for the *khasa* horses on which the emperor Akbar used to ride.[20]

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17. Ibid., p. 141.
18. Ibid., p. 142.
19. Ibid., pp. 143-44.
20. Ibid., p. 145.

The management and maintenance of the horses was a unique feature. A large number of officers and servants were appointed for the keeping of the horses.[21]

Like other animals, the camel was also an important animal during the Mughal period. Akbar paid full regard for the maintenance of this animal. He used to like it, because of its great use for the three branches of the government. It was very dear to the emperor because of its patience under burdens, for its contentment with little food, and for its strange shaped body. The camels received every care at the hands of his majesty. For the regard of the dignity of his court, Akbar ordered camel fights and for this purpose several choice camels were always kept in readiness. The best of these camels were *Khasa* camel. The *khasa* which was named as *Shahpasand*(approved by the Shah), was a country bred twelve years old. It had strange habits like it used to overcome all its antagonists, and exhibit in a manner in which it stoops down and draws itself up every finesse of the art of wrestling.[22]

The camels were found in Rajasthan as it has been the land of this animal. They were numerous near Ajmer, Jodhpur, Nagor, Bikaner, Jaisalmer, Batinda and Bhatnir. But in 'Sind', they were in greatest abundance. Many inhabitants owned ten thousand camels and upwards.

There were many reasons to keep the camels, like its use for loading, army, breeding, and for its (camel) fights, etc. When camels were used for loading and traveling, they were generally formed into *qatars* (strings). Each *qatar* was of five camels. The first camel of the *qatar*, was called *peshang,* the

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21. Ibid., p. 148. (for details see appendix also)
22. Ibid., p. 151.

second *peshdara*, the third *miyana*, the third *dumdast* and the last camel *dumdar*.[23]

The emperor made proper arrangements of food for the camels. Both male and female camels got according to their age and capacity. The camels which were used for burden and travelling were called '*bughdis*'.[24]

A number of articles were used to keep these camels properly and safely. It was a difficult task to maintain these camels properly, so the emperor appointed large number of servants to look after the camels. [25]

It was a difficult task to maintain these camels properly, so the emperor appointed large number of servants to look after the camels.[26]

During the Mughal period particularly of Akbar's time the cow was also regarded as an important animal. While it has been very dear in Hindustan. So there were a number of reasons to keep this animal. It was very important for milk, butter, *ghee* and particularly for young calf. The oxen which the cows used to give birth were very important for carrying burden and also for the agriculture. These oxen were capable to draw the carts, so this increased the importance and need to keep the cows under perfect management system. Akbar paid full attention for cows because of their wonderful uses. He noticed everything of this animal and tried his best to improve the life and race of this animal. He divided them into classes, and committed each to the charge of a merciful keeper. One hundred choice cattle were selected as *khasa* and called *kotal*. They were kept in readiness for any service, and forty of them were

23. Ibid., p. 151.
24. Ibid., p. 152.
25. *Ibid.*, p. 152.
26. Ibid., p. 155. (for details see appendix also)

taken unloaded on the hunting expeditions. The fifty-one others nearly as good were called half *kotal* and fifty-one more, quarter-*kotal* were kept. Any deficiency in the first class was made up from the second, and that of the middle from the third. But these three categories from the cow stables were for his majesty. Similarly there were also species of oxen, called *gini* which were like horses in size but much beautiful. The milch-cows were kept under the care of an intelligent servant. There were a number of servants to look after these cows and buffaloes.[27]

The emperor divided these cows and buffaloes in to different classes. He made special arrangements of food for them.[28]

There was another factor for which the cow got an important place among the animals, the cow was useful for milk. Similarly buffaloes were also important for milk. So during Akbar's time to milch-cows, and buffaloes, got a considerable quantity of food in proportion to the quantity of milk they gave.[29]

Apart from the salaries, emperor also made certain rules and regulations for the servents. Even he made provisions of fine or penality if any servent failed to perform his duty with sincerity. Similarly if any mishappening was reported about the cattle, the emperor charged him with fine.[30]

One may wonder about the keenness of the emperor which he showed about the animals. After his busy schedule of governing the state, Akbar always tried to concentrate towards animal world. He tried to identify a number of species of animals. Similarly another animal was mule. Abul Fazl writes that

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27. Ibid., p. 157.
28. Ibid., p. 158
29. Ibid., p. 160
30. Ibid., p. 160 (for details see appendix also)

the mule has some strange features. It possesses the strength of a horse and the patience of an ass, and though it does not have the intelligence of the former, it has not the stupidity of the latter. One thing which is very famous about the mule is that it never forgets the road which it has once traveled. So it was liked by his Majesty, whose practical wisdom was extraordinary. Its breeding was very much encouraged, because it was best animal for carrying burdens and traveling over even ground, because of its very soft steps.

The mules were not only regarded in Hindustan but also in many other countries. In many countries just princes used to prefer traveling about on a mule and people could therefore easily layed their grievances before them, without inconveniencing the traveller. So this was the importance of this animal. During Mughal period not only Hindustani breed of Mules was used but also from many other countries like Iraq-i -Arab and Iraq-i-Ajam etc. So the emperor imported this animal from outsides of Hindustan too.[31] The mules were also maintained categorically. Like camels they were formed into *qatars* of five, and had the same names, except the second mule of each Qatar, which was known as *bardast*'. Abul Fazl mentions that mules reach the age of fifty.

Like other animals considerable quantity of food was given to the mules. For the maintenance of the mules a number of articles were needed. The emperor took special measures to prepare these articles and equipments.[32]

For the maintenance of the mules servants were also appointed. The emperor divided the mules into *Qatars*. Each *Qatar* was under a keeper. The Turanis, Iranis, and Indians, were appointed to this office.[33]

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31. Ibid., p. 161.
32. Ibid., p. 162.

The asses were also employed for carrying burdens and fetching water. Proper arrangements of food were done for them. According to their capacity, the emperor tried to provide them enough to eat. The asses used to get 3 *sers* of grain and 1 *dam* for grass. While the furniture for the asses was the same as that for country bred mules, but no saddle was given for them. The annual allowance for the repair of the furniture was 23 *dams*. There were keepers too, who used to look after these asses. At that time these keepers did not get above 120 *dams* per mensem. Therefore asses were also among the animals which were kept by the emperor.[34]

Abul Fazl mentions that Akbar paid much attention for the preservation of deer. The emperor was highly surprised about the nature of this animal. He often called it stubborn and timid creature. He noticed that the manner of fighting of this animal was very different and interesting. Similarly its method of stooping down and rising up again was a source of great amusement. Like other animals the deer were also categorized. One hundred and one deer were placed under *khasa* category; each of them had a name and some peculiar qualities. All of them were kept properly by the keepers and a keeper was placed over every ten.[35]

There were different purposes to keep the deer, i.e. fighting, hunting and also for breeding. There were three kind of fighting deer, first, those which were used for fighting with the deer borne in captivity or with wild ones. Secondly such deer which used to be capable to fight with tame ones, and third was kept to fight with wild deer. This third one was known for attacking the

33. Ibid., p. 163.
34. Ibid., p. 163. (for details see appendix also)
35. Ibid., p. 228.

wild deer. Akbar made certain rules for deer fights. These fights were conducted in three different ways. In the first, the fight was conducted according to the number, i.e. the first hand to fight with second, the third with the fourth and so on, for the whole. In the second, the fight with the third, the second with the fourth and so on. If a deer was found to be run away then, it was placed at the last. If such deer was found timid or happened to be run away three times then it had to be ceased as '*khasa*'.[36]

The betting on these fights was allowed and the stake did not exceed 5 *dams*. After that fights were conducted with those which belonged to the princes. The five *khasa* pair had to fight with each other, similarly two '*khasa*' pair from his majesty's hunting ground, then five other '*khasa*' pair used to fight accordingly. In the same manner two pair from the deer park of his majesty's hunting ground also engaged in fight. Afterwards five '*khasa*' deer were engaged with five deer which were belonged to the older prince. Then fourteen '*khasa*' pair had to be engaged with each other, and afterwards with the deer of the prince, till the end of the fight. While the deer of the prince also engaged with each other and after all they had to fight with '*khasa*' category. The betting on such fights could not exceeded one *'muhur'*. After all, the common people also enjoyed these frights. The fight was also allowed with the deer of the common people. There were proper arrangements of food for these deer.[37]

A number of servants were employed for the care of the deer. In the deer park, *Mansabdars*, *Ahadis* and other soldiers were employed to look after the

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36. Ibid., p. 229.
37. Ibid., p. 230.

deer. They got considerable pay for this work. The pay of foot soldiers varied from 80 to 400 *dams*.[38]

One interesting thing was that Emperor Akbar himself engaged dogs for hunting purpose. There were many dogs to hunt animals. *Siyah-gozh,* "His Majesty is very found of using this plucky little animal for hunting purposes. In former times it would attack a hare, or a fox, but now it kills black deer. It eats daily 1 *ser* of meat. Each has a separate keeper, who gets 100 d., per mensem".[39] The dogs were very helpful for hunting purposes and also for tracing the hidden animal. One more things was that the dogs were capable to engage with dangerous animals for some moments, which could give enough time to the hunter to be alert and to attack the dangerous animal. Akbar used to like this animal very much for his excellent qualities. He imported dogs from all countries. The excellent dogs came from Kabul specially from the Hazara district (north of Rawal Pindi). At that time the servants had maintained these dogs very carefully. They even ornamented the dogs, and gave them names. Dogs were capable to attack a tiger. They were highly trained for the purpose of help and security. The *khasa* dogs got daily 2 *sers* of meet, similarly other got 1 ¼ *ser*. There was one keeper for a every two *'Tazi'* (hunting) dogs, their wages were 100 *dams*., per mensem. In this way dogs had been very helpful for hunting purpose.[40]

Like animals, birds of different variety were also kept for various purposes. Falcon (*Baz*)was very important for the purpose of hunting other birds. His majesty was very found of such remarkable birds and often used

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38. Ibid., p. 230. (for details see appendix also)
39. Ibid., p. 301.
40. Ibid., p. 301. (for details see appendix also)

them for hunting purposes. Though he trained the *baz*, *shahin*, *shungar*, and *burkat*, falcons, and made them to perform wonderful deeds. His majesty preferred the *basna*, to this class of hawks he had given various names.[41]

In the middle of spring the birds were inspected, after this they were allowed to moult and were sent into the country. As soon as the time of inspection was over, the birds were again inspected. The commencement was also made with the '*khasa*' falcons (*baz*) which were inspected in the order in which they had been brought. The precedence of *jurras* was determined by the number of games killed by them. Then come the *basnas*, the *shahins*, the *khelas*, the *chappak basnas*, the *bahris*, the young *bahris*, the *shikaras*, the *chappak shikaras*, the *turmatis*, the *rek*, the *besras*, the *dhotis*, the *charghs*, the *charghila*, the *lagars* and the *jhagars* (which his majesty called the *chappak* the kind of *lagars*). The *molchins* were also inspected. The *molchicn* was a creature resembling the sparrow, yellowish plumage, like the *shahin*, it was capable to kill a *kulang* crane.

Abul Fazl writes "Many other birds can be trained for the chase, though I cannot specify all. Thus the crow, the sparrow, the *bodna*, and the *Saru* will learn to attack. His Majesty, from motives of generosity and from a wish to add splendour to his court, is fond of hunting with falcons, though superficial observes think that merely hunting in his object".[42]

The keepers to look after these birds were employed in this department and a considerable amount was given also for the expense of food of these

41. Ibid., p. 304.
42. Ibid., p. 305.

birds.[43] The above description shows the spirit and great interest of Emperor Akbar in the animal world. The animals and birds were kept for various purposes and Akbar successfully managed and maintained them. There is no 'doubt about this management which was unique and wonderful too.[44]

Treatment

The treatment of birds and animals was also a wonderful step taken by the Mughal government. Sometimes the animals got injured, sometimes they used to feel sickness and sometimes they had to face an accident. Thus to deal with such mishappenings, there was great need to establish hospitals so that the affected birds and animals could have recovered from that misery. For this purpose the emperors established hospitals for the health care and treatment of these birds and animals.

Pietra Della Valle, who visited India in the reign of emperor Jahangir described about one of these pinjrapolis at Cambay. He writes that "the house of this hospital is small, a little room sufficing for many birds of all sorts which need tendance, as cocks, hens, pigeons, peacocks, ducks and small birds which during their being lame, or sick or mateless are kept here, but being recovered and in good plight, if they be wild are lent go at liberty, if domestic they are given to some pious person, who keeps them in his house. The most curious thing I saw in this place, were certain little mice, who being found orphans without Sire on Dame to tend them, were put into the hospital, and a venerable old man with a white beard, keeping them in a box amongst cotton, very diligently tended them with his spectacles on his nose, giving them milk to eat

43. Ibid., p. 305.
44. Ibid., p. 306, (for details see appendix also)

with a bird's feather, because they were so little that as yet they could eat nothing else, and as he told us, he intended when they were grown up, to let them free whither they pleased".[45]

Similarly, we have information that even during the time of Aurangzeb the treatment facilities were given for the affected birds and animals. There was a hospital too for the birds and animals at that time. Mons de Thevenot writing in the time of 'Aurangzeb' of the city of Ahmedabad, states: "In this town there in all the sick birds, they find and feed them as long as they live if they be indisposed. Four-footed beasts have their also: I saw in it several oxen, camels, horses and other mounded beasts who were looked after and well fed, and which these idolaters buy from Christians and moors that they may deliver (as they say) from the cruelty of infidels, and there they continue if they be incurable, but if they recover, they sell them to the gentiles and non else".[46]

Tuzuk-i-Jahangiri mentions that once emperor Jahangir ordered that the elephants should be provided lukewarm water in winters because they shiver due to cold were very fond of water, he writes, "on Monday, the 13th, I went to hunt and shot a blue bull. From the day on which the elephant *Nur-bakht* was put into the special elephant stables, there was an order that he should be tied up in the public palace (court). Among animals elephants have the greatest liking for water, they delight to go into the water, notwithstanding the winter and coldness of the air, and if there should be no winter into which they can go, they will take it from a water bag (*mashk*) with their trunks and pour it over

45. Pietra Della Velle, *The Travels of Pietro Della Valle in India*, ed. Edward Grey, vol. II, New Delhi, 1991, p. 246.
46. Mons de Thevenot & Careri, *Indian Travels of Thevenot & Careri*, ed. Surendranathsen, New Delhi, 1949, p. 16.

their bodies. It occurred to me that however much an elephant delights in water, and it is suited to their temperament yet in the winter the cold water must affect them. I accordingly ordered the water to be made lukewarm (as warm as milk) before they (the elephants) poured it into their trunks. On other days when they poured cold water over themselves they evidently shivered, but with warm water, on the contrary they were delighted. This usage is entirely my own".[47]

Breeding :

The breeding of animals and birds was another remarkable feature of Mughal India. Akbar and Jahangir both paid much attention to the animal world. A number of experiments were done for the survival of the animals and birds. Though they used them for various purposes, but it was necessary to safeguard their species for which they tried to breed them. Akbar himself took keen interest in the breeding of various animals. The purpose behind this was wonderful experiments and to produce strong breed of these animals. There is no doubt that both Akbar and Jahangir contributed much in this field. We find references in both *Ain-i-Akbari* and *Tuzuk-i-Jahangiri*, which prove that Akbar and Jahangir paid attention for the breeding of animals like elephant, *cheetah*, mules, barbery goat, saras, cross-breeding of markhur or mules, cow, cross-breeding of *markhor* and ibex, cheer pheasant etc.

Akbar himself took great interest in breeding of animals like elephants and others too. Abul Fazl mentions about the method of breeding of the elephants. He also mentions that in former times the people used to think that

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47. Jahangir, *Tuzuk-i-Jahangiri*, tr. A. Rogers, ed. H. Beveridge, vol. II, London, 1909. p. 180

the breeding of the elephants is unlucky, but this kind of superstition was removed from the minds of the people, when the emperor started breeding of a very superior class of elephants.

The female elephant generally gave birth to a young one, but sometimes two. The new born had to content themselves with the milk of their mother for four or five years, and after this period they could eat the grass and herbs. This is natural phenomenon that every creature has physical desires and for safeguarding its own race, every creature gives birth to new one. Similarly elephant has also physical or the sexual desires, both male and female enter into sexual intercourse. After this the female has to pass several stages. There are some natural signs and changes in the body and behaviour of a female, through which one can understand about such happening. Abul Fazl writes that the female elephant has twelve days a red discharge, after which gestation commences. During this period they look startled and sprinkle themselves with water, soil and keep ears and tail upwards, and go rarely away from the male. After that they rub themselves against the male, bend their forefeet below his tusks, smell his urine and dung and cannot bear to see another female near him.[48]

One very interesting thing about the female elephant is her behaviour at that time. Sometimes if a female elephant shows her unwillingness to intercourse with the male or if forced to do so then she makes a noise and another female elephant comes for her rescue.

48. Abul Fazl, op.cit., vol. I, p. 125-26.

The time of gestation of female elephant is generally eighteen lunar months. For three months the fluid germination intermixes in the womb of the female, when agitated the mass looks like quicksilver. Towards the fifth month, the fluids settle and get gelatinous. In the seventh month, they get more solid, and draw to perfection towards the ninth month. In the eleventh, the outline of a body is visible, and in the twelfth, the veins, bones hoofs, and hair, make their appearance. In the thirteenth month the genitalia become distinguishable, and in the fifteenth, the process of quickening commences. If the female, during gestation, gets stronger, the foetus is sure to be a male, but if she gets weak, it is the sign of a female. During the sixteenth month the formation becomes still more perfect, and the life of the foetus becomes quite distinct. In the seventeenth month there is every chance of a premature birth on account of the efforts made by the foetus to move, till, in the eighteenth month, the young one is born.[49]

According to others the sperm gets solid in the first month, the eyes, the nose, mouth, and tongue are formed in second, in the third month, the limbs made their appearance, in the fourth, the foetus grows and gets strong, in the fifth, it commences to quicken, in the sixth, it gets sense, which appears more marked during the seventh month, in the eighth, there is some chance of a miscarriage, during the ninth, tenth, and eleventh months the foetus grows, and is born during the twelfth. It will be a male young one if the greater part of sperm comes from the male, and it will be a female young one if the reverse is the case. If the sperm of both the male and female is equal in quantity the

49. Ibid., p. 126.

young one will be a hermaphrodite. The male foetus lies towards the right side, while the female towards the left and a hermaphrodite in the middle.

The elephants were given different names for which they were known time to time. In this state they called *bal*, when ten years old they given names. At the age of twenty they were called *bikka*, at the age of thirty they were known as *kalba*. In fact this animal changed appearance every year after that a new name had given to it. Abul Fazl writes that at the age of sixty, the elephant is full grown.[50]

Jahangir also paid much attention for the breeding of the elephants. Jahangir writes in *Tuzuk* that he himself noticed the gestation period of this animal. In his own words "on the night of Sunday, the 11th of the month of *Tir*, a female elephant in the private elephant stud gare gave birth to a young one in my presence. I had repeatedly ordered them to ascertain the period of its gestation, at last it became evident that for a female young one it was 18 months and for a male 19 months in opposition to the birth of a human being, which is in most cases by a head delivery, young elephants are born with their feet first. When the young one was born, the mother scattered dust upon it with her foot, and began to be kind and to pet it. The young one for an instant remained fallen, and then rising, made towards its mother's brests".[51] During his reign Akbar took interest in horse breeding too. The skillful, experienced men have paid much attention to the breeding of this sensible animal, many of whose habits resemble those of man, and after a short time Indian ranked higher in this respect, Arabia, whilst many Indian horses can not be

50. Ibid., p. 126.
51. Jahangir, op.cit., p.

distinguished from Arabs or from the Iraqi breed. There were fine horses bred in every part of the country, but those of Kachh were equal to Arabians. It is said that a long time ago an Arab ship was wrecked and driven to the shore of Kachh, and that it had seven choice horses, from which, according to the general belief, the breed of that country originated.[52]

In the Punjab horses resembling Iraqis, were bred especially between the Indus and the Behat (Jhelum), They were known by the name of Sanuji, so also in the district of Pati Haybatpur, Bajwaral, Tihara, in the suba of Agra, Mewat and in the suba of Ajmir, where the horses had the name of *Pachwariya*. In the northern mountain district of Hindustan, a kind of small but strong horse was bred, which were called *gut*, and in the confine of Bengal, and near Kuchh, another kind of horses occurred, which were ranked between the *gut* and Turkish horses, and they were called *tanghan*. The important thing was that these horses were strong and powerful enough.[53]

After the breeding of the horses, the camel was another important animal for breeding purpose. The camels were numerous near Ajmer, Jodhpur, Nagor, Bikaner, Jaisalmer, Batinda, and Bhatnir. The best camels were bred in the suba of Gujarat, near Kachh. But in Sind they were found in greatest abundance. In Sind the people mainly inhabitants owned ten thousand sand camels and upward. The swiftest camels were those of Ajmer while those found in Thatha were best for burden and traveling. This was best breed of the camels.[54]

52. Abul Fazl, op.cit., p. 140.
53. Ibid., p. 140.
54. Ibid., p. 151.

The success of this department depended on the *Arwanas*, i.e. female camels. In every country they used to get hot in winter and after that engaged in intercourse. The male of two huwps were by the name of *Bughur*. The young ones of camels were called *nar* (male) and *maya* (female), while Akbar has given to the *nar* the name of *bughdi*, and to the female that of *jammaza*. The *bughdi* was better for carrying burdens and also used for fighting. The quality of *jammaza* was its swiftness. The Indian camels were called *lak* and its female was known for swiftness like the males. In swiftness sometimes the female surpassed the male.[55]

The offspring of a *bughur* and a *jammaza* went by the name of *ghurd*, the female was known *maya ghurd*. If anytime a *Bughdi*, or a *lok* coupled with an *arwana*, the young male was named after its sire and the young female after its *dam*. The *lok* was considered superior to the *ghurd* and the *maya ghurd*. The mules were also important for different purposes. So, it was a need to produce their similar or other changed race. Akbar used to like the mule because of its qualities and sensitivity. Abul Fazl writes "Hence it is liked by his Majesty, whose practical wisdom to everything, and its breeding is encouraged". The mule was regarded the best animal for carrying burdens and travelling over uneven ground. Its soft steps were very much appreciated by Emperor Akbar. Abul Fazl writes about the breeding of a mule that people generally believe that the male ass couples with a mare, but the opposite connection also is known to take place, as mentioned in the books of antiquity.

55. Ibid., p. 152.

The mule resembles its dam. His majesty had a young ass coupled with a mare, and they produced a very fine mule.[56]

The mules were only bred in Pakholi and its neighbourhood. The simple inhabitants of the country used to look upon them, as asses and thought it derogatory to ride upon them, but in consequences of the interest which his majesty took in this animal, such disliking of this animal was removed from the mind of the people, and during his reign such a great dislike was no where to be found.[57]

After Akbar, Jahangir paid full attention for breeding of birds and animals. The description about the breeding of the animals and birds in *Tuzuk* is really wonderful. According to Emperor Jahangir the male and female *cheetahs* did not pair off when they were kept for the purpose of breeding. Even his father (Emperor Akbar) once collected together 1000 and desired that they should pair but this did not happen. He had many times coupled male and female *cheetahs* together in gardens, but there too, it did not come off while during this time a male '*cheetah*' having slipped its collar (neckband), went to a female and had intercourse with her and after two and a half months three young ones were born and grew up. This had been recorded because it appeared strange as *cheetahs* did not couple with '*Cheetahs*' (still less) had it ever been in former times (?) that '*Cheetahs*' mated in captivity. During Jahangir's reign the wild beats have abandoned their savagery and there was no need to keep them in the bonds of chains because they had become so tame that they neither harmed people nor had any wildness or alarms. It was strange that

56. Ibid., p. 161.
57. Ibid., p. 161.

a tigress became pregnant and after three months she gave birth to three cubs. It was wonderful because it had never happened that a wild tiger had paired in the captivity. One more thing was heard about the tigress that her milk was of great use for brightening the eyes.[58]

Jahangir had also written about the breeding of cheer pheasant and of wild birds which were called *tadru* (pheasant). This was also a fact that it had never been heard that they breed in captivity. During the time of his father (Emperor Akbar) efforts were made to obtain eggs and young ones, but it was not managed. While by the orders of Jahangir some male and female were put together for the breeding purposes. He had also ordered to place the eggs under hands, and in a space of two years sixty or seventy youngs were produced while fifty or sixty were grew up. Whoever heard of this matter was astonished. I was said that in the wilayat (Persia?) the people there had made efforts, but no eggs were produced and no young were obtained.[59]

In the same way the cross breeding was also an important feature of Jahangir's wonderful experimental work of animal breeding. He writes about the cross breeding of Ibex and *markhor* goat. One Ibex was sent to him by Sayyid Bayazid Bukhari the *faujdar* of Bhakkar, which he had brought from the hills, when it was small and brought up in his house. Jahangir mentions that this Ibex pleased him very much among all the *markhur* and hill sheep. But he also says that "I never saw a *rang* (tame). I ordered them to keep up with the Barbary goats, in order that they might pair and produce young ones without doubt, it is not allied to the *markhur* or the *quchqar*".[60]

58. Jahangir, op.cit., vol. I, p. 240.
59. Ibid., p. 216.
60. Ibid., vol. II, p. 114.

In Ahmedabad he had two male *markhur* goats but there was no female in his establishment to pair with them. It occurred to him that if he could pair them with the Barbary goat, which was brought from Arabia, especially from the part of the city of Darkhur, then a young of their form and qualities might be obtained. In short he paired them with seven barbary ewes and after six months had elapsed each of the latter had a young one at Fathpur: there were four females and three males in pleasing appearance of good shape and good colour. In their colour, those (kids) which resembled the male (taka, not baka, as in the printed copy) were dun coloured with black stripes on their backs. But red, indeed, appeared to Jahangir more pleasing colour than any other, and it was the mark of a better breed. In the words of Jahangir "their liveliness and laughable ways and their manner of gamboling and leaping what can be written? Some of their ways are such that the mind derived uncontrolled pleasure from looking at them. It is notorious that painters cannot draw properly the motions of a kid. Granting that they chance to draw the movements of an ordinary kid after a fashion, they certainly would have to acknowledge themselves at a loss how to draw the motions of these kids. When one month, or even twenty days old, they would leap up upon high places and throw themselves.... I am much delighted with them, and well bred she goats. I desire to have many young ones from them, and that they may become well known among men. After their young shall have paired, most probably more delicate ones will be obtained. One of their peculiarities is that ordinary kids immediately they are born, and until they begin to suck, make a great bleating

whilst these, on the contrary make no sound, and stand quite contented and without wailing. Perhaps their flesh would be very pleasant to the taste".[61]

Jahangir's observation about the habits and life of the birds and animals is remarkable. His description about saras and wild antelopes proves his excellency and quality of keen observation. He writes about saras that they recognize their fellow saras by hearing their cry. Jahangir also mentions about the fight of saras and catching of it. But Jahangir being a just and his love for justice forced him, to see one saras free in the sky. He writes in *Tuzuk* that "on Sunday, the is28th, I marched from the bank of Mahi and on Monday I marched again. On the day a strange sight was witnessed. The pair of saras that had young ones had been brought from Ahmedabad, on Thursday (the 25th). In the court of royal enclosure, which had been placed on the bank of a tank, they were walking about with their young ones. By chance both the male and female raised a cry, and a pair of wild saras hearing it, and crying out from the other side of the tank, came flying towards them. The male with the male and female with the female, engaged in fight, and although some people were standing about the birds paid no need to them. The eunuchs who had been told off to protect them hastened to seize them.

One clung to the male and the other to the female. He who had caught the male kept hold of it often much struggling, but the one who seized the female could not hold her, and she escaped from his hand. I with my hand put rings in his beak and on his legs and set him free. Both went and settled in their own place. Whenever the domestic Saras raised a cry they responded. I saw a sight of this kind in wild antelopes when I had gone to hunt in the pargana of Karnal. About thirty of my huntsmen and servants were in attendance, when a

61. Ibid., vol. II, p. 88.

black buck with some deer came in sight, and we let loose the decoy-antelope to fight him. They butted two or three times, and then the decoy a noose on its horns and to let it go, that it might capture (the wild one). Meanwhile the wild antelope, in the excess of its rage, not looking at the crowd of men, ran without regard to anything and butting the tame buck two or three times fought with it till it fled. The wild antelope there upon made its escape".[62]

62. Ibid., p. 42.

Chapter - 8

Relevance of Mughal Miniatures in Describing Wild Life

RELEVANCE OF MUGHAL MINIATURES IN DESCRIBING WILD LIFE

Animal and flower painting is as old as the human race. Representation of wild life has been a recognized theme of painting persistently practiced by the artists from the time immemorial. The earliest specimens of finest animal paintings, sometimes in polychrome which are to be found in the cave of Altawira, in Spain and also in France, date back to the cave period of human history. The cave artists were hunters and they were obsessed with the only one subject, that is, the animal world. They depicted those animals which they encountered either in search of food or in self-defense. They are wild horses, cattle, deer, reindeer, bison, mammals, birds and fishes. They are astonishingly vivid and lifelike. Chinese and old Indian art is replete with the drawings of animals, birds, and reptiles which are undoubtedly marvels of workmanship, either relieved or painted. Dragons, and flying ducks which play a characteristic role in the Chinese landscape painting are borrowed by the Muslims unhesitatingly and introduced skillfully in their painting merely to enhance the dramatic effect, tenseness of the setting and decorative brilliance without any mythical or sentimental interpretation.[1]

Representation of animals on the walls of the ancient cave temples is not foreign to Indian art tradition. Ancient Indian Art was so maulded on religious sentiments that "the painter at the time of painting has no other mental state than the formative spirit that translates itself externally into pictorial representation. That pre-historic man's artistic activities in India were limited

1. S.M. Hasan, The Mughal School of Zoological Portraiture, *Art and Letters India, Pakistan, Ceylon*, the Journal of Royal India, Pakistan and Ceylon Society, London, 1963, p. 3.

to the representation of animals such as rhinoceros and other species from the late stone age has been discovered in the Mahadeo Hills. The sculpture of Bharhut, Sanchi, and Amaravati are replete with representation of wild beasts and jungle life. An explanation of the representation of animals in the stone sculptures of Bharhut and Sanchi can be found in the statement of John Irwin, "while Buddhism in proclaiming the equality of man expressed a new humanism and a strong faith in the brotherhood of man, at the same time its gospel of reincarnation stressed the unity of all life and the identification of man with nature. From his arose the intense feeling for nature and animal life which are found displayed in the Bharhut and Sanchi reliefs where animals and as well as human beings, bring flowers and other offerings in homage to the symbol of the Buddha. In the procession headed by gaily caparisoned elephants and horses; in the ponds teeming with lotuses, waterfowl and lush with here and there a buffalo cooling herself in the water. The treatment everywhere was full of sympathy, kinship and affection and the theme was unique, for its period in the history of Art.[2]

At Amaravati the delightful studies of animal life reached their climax of perfection, although they were greatly mystical. Behind all the studies of wild life the basic theme is the inspiration of Indian Art by Indian religion and philosophy. Eric Grill has put forward the idealism of Indian Art thus: "There is in all Indian Art a recognition of the fundamental principle that Art has not for its raison d'être the satisfaction of man's desire for material beauty in its surroundings. Such satisfaction was put by the way though attained all the more inevitably in that it was not sought as a means or as an end. It was, as it

2. Ibid, p. 3.

must already be, an accident". The same remark can not be applied to the studies of wild life under the secular minded and luxurious Mughal Emperors. Material beauty, aesthetic feeling and pleasure without any tinge of religious sentiments were an axiomatic truth in case of animal and bird paintings of the Mughals.[3]

A glance to the bird and animal paintings of the Persians may be of great use in understanding the characteristic features of the bird and animal studies of the Mughal painting. Although not separate studies, drawing of animals was also practiced in Persia from the earliest times. The Maqamat of Hariri dated A.D. 1237, executed by al-wasiti, exhibits truthful pastoral scenes which include horse, camel, ass, goat. In the drawing of a group of camels closely packed and rhythmical in their treatment the artist expresses with amazing clarity all that is camelish. The representation of flying ducks in Chinese origin has already gained ground in the landscape background of Mongol school of painting.[4]

The representation of elephant which is rarely found in Persian miniature painting is, of course, Indian in character. The finest example of an attempt to blend art with nature is to be found in the sumptuous illustration of *Kalila-wa-Dimna* copied by Nasr Allah Abul Maali, dating from the second decade of the 15th century, now in the greatest exponents of Muslim illustrative art introduced nature as a background not studied for its own sake but the *Kalila-wa-Dimna* illustrations mark the departure from such established conventional method of nature painting. The truthful delineation of the animal

3. Ibid, p. 4.
4. Ibid, p. 4.

fables are fully demonstrated in the *Kalila-wa-Dimna* illustrations. Nature is here represented as a world of earth, trees, water and flowers on which men and animals are merely tenants.[5]

The only attempt to create a delightfully imaginative non-human and non-animal world is to be found in the Shiraj School of Persian painting, especially the illustration of the Istambul Anthology dated 1399. There is a marked advancement in the treatment of naturalism in the animal drawings, exhibited by Bihzad. The grazing of the horse, the suckling of the colts are realistically portrayed. He is sometimes credited with the introduction of bird studies and animal paintings, although we do not find any independently treated studies of birds or animals. Another illustration by Bihzad depicting Majnu's death in Laila's tent represents animal world such as jackal, lion, panther, gazelle, as the domesticated animals. The drawing of horse was executed with rare purity and grace and delicate charm by Sultan Muhammad when he depicted Khusrau watching Shirin bathing.[6]

With the inception of the Mughal rule in India, painting received a mighty impetus. The greatest contribution of Mughal painting to Indian art was the portrait style. The next important subject of representation in Mughal painting is the study of birds, animals and reptiles, manifesting both the Indian and Persian technique. During the period of Akbar, the precursor of the Mughal school of painting, drawing of animal as separate studies was not in vogue. As Akbar's period was formative, the Indo-Persian artists excelled in the delineation of animals and birds when they illustrated battle scenes or hunting

5. Ibid, p. 5.
6. Ibid, p.6

scenes from a manuscript. As the artists were mostly Hindu trained in the technique of Ajanta frescos, the drawing of animals reflect the traditionl Indian art . The crudity and unexpressive moods of the black bears and monkey dated 1570, reproduced by Wilkinson in his, "*Mughal Painting*" shows that animal art was to make a great progress in the next fifty years. That the artists failed to shake off the stiffness and formality of the old Persian school in the reign of Akbar is provided by an illustration from *Iyar-i-Danish* reproduced in the "*Art & crafts of India and Pakistan*, where the most dominant painting technique is decidedly Persian. Although exhibiting realism and modeling, the illustration showing Solomon amidst the beasts of creation is thoroughly Persian in style so far as the composition, colouring and figural representations are concerned. Of course, we find some Indian wild life in the painting. There is an apotheosis portrait of Akbar by Govardhan depicting lion and a heifer under his feet. Although the main emphasis here is on the life like portrait, the painter has admirably succeeded in displaying the tamed attitude of the two antagonistic beasts. Abul Fazl has referred to several Hindu artists, namely, Basawan, the portrait painter, Dasawant, the mural and a miniature painter, Jagan, or Jagannath, the animal painter and many others. There is a faithful representation of a pair of tiny peacocks executed with careful finish and minutest detail and exquisite delicacy which has come down to us from the hands of Jagannath, now in the British Museum, *Baburnama*.[7]

An early representation of peacock is found on the North Gate at Sanchi, where at the two ends of the middle architrave there are stone sculptures of a pair of peacock set crosswise. There is no wonder that the Hindu artists of

7 . Ibid, p. 6.

Akbar's court would look to the ancient art traditions of Sanchi and Ajanta for their inspiration. There is another delightful study of wild buffalo in the British Museum, Baburnama drawn by Sarwan, dating from about A.D. 1600. On looking at the picture one can hardly desist from comparing the picture with the two fighting buffaloes in the cave No. 1 at Ajanta. The two fighting bulls represent the artist's knowledge of animal form and his power of expressing vigorous action. The humps resemble those of the bullocks drawing the chariot, executed by Abul Hasan in the reign of Jahangir.[8]

If Akbar was the greatest monarch of Mughal dynasty, it can not be denied that Jahangir was far and away its greatest naturalist. His profuse and engrossing memoirs are a veritable natural history of the animals that came under his notice, and a record of the most searching observations concerning them. It has been rightly said of Jahangir that had he been head of a Natural History Museum he would have been a better and happier man. Besides a passion for justice the outstanding features of his character were his love of nature and his powers of observation.[9]

Under Jahangir, the greatest patron of Mughal art, Mughal technique of painting strove to a new path in order to liberate independent studies of man and animal from the so-called miniature paintings. In this respect Jahangir can be regarded as the greatest connoisseur of Indian art as he allowed liberal encouragement to the un-settered drawings of nature. Never before in any painting have we come across with the study of an individual bird or animal for its own sake, perfectly manifesting aesthetic beauty without any religious tinge

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8. Ibid, p. 6 & 7.
9. Salim Ali, The Mughal Emperors of India as Naturalist and Sportsmen, *the Journal of the Bombay Natural History Society*, Vol. 31, Pt. 1, Bombay, 1927, p. 290.

than the period of Jahangir with the rendering of nature. Persian technique receded back of coruse, exhibiting the Persian delicately decorative sense. Jahangir's maddening interests in birds, flowers and animals opened a new vista to the Mughal artists. Subjects which under Akbar had only an insignificant place in the pictorial scheme were now depicted with the loving exactness. Birds, flowers and animals were not added in painting merely as accessories to complete the theme of the scene or to decorate the borders of miniatures. They absorbed a whole page, drawing attention to them in its own right.[10] Jahangir's keen appreciation of nature infused his court painters to draw furious birds, animals and unusual trees and flowers. Drawing of birds and animals are less successful in the hands of the Indian painters than the same subjects when isolated. The artists have not that intense feeling for wild non-human life which can identify itself with the world. They do not approach the world as a whole but have an exquisite vision of a particular chosen beauty. Jahangir's passion for field sports was accompanied by a genuine aesthetic taste. He was profoundly affected by the beauty of the natural world and had an artist's eye for the grace of the birds and animals.[11]

Binyon in his "*Asiatic Art*" has reproduced several studies of wild life. The drawing of ox, mule, and bees dating from the early 17th century exhibits the curious combination of ox and mule engaged in operating the Persian-wheel, introduced through the mobile attitude of the animals.[12]

10. R.L. Binyon, *Court painters of the Grand Mughals*, Oxford University Press, 1921, p. 64.
11. Hasan, op.cit., p. 8.
12. Binyon, op.cit., p. 64.

Another illustration depicting a black buck with an attendant, dated 1615, is a charming piece of animal study executed by Manohar.[13] The animal is drawn in an alerted mood which is expressed by the wagging of his tail, sloth movement and gazing eyes. The buck has an orange red coat on his back powered with a small gold pattern and his horn is cased in similar fashion. A bell hangs at his throat. This is one of the finest genre pictures of the Mughal school. It is undoubtedly a magnificent study of animal life and the coaxing attitude and expression of the groom, as if trying to overcome the hesitation of his well-trained pet is perfect in technique and characterization. On observation an author remarks that "all is dainty, speckles, sumptuous".[14]

In the British Museum copy of *Baburnama* there is a curiously interesting illustration in Persian style, representing all the birds, beasts and fishes of creation. A fantastic purple crag of conical shape, rises up in the centre of the skin. A horse chins up the crag, a group of horses is below. A sinuous scaly dragon coils up out of the rocks, on the one side of the rock there are snakes and on the other a tiger, a leopard and *cheetahs*. There are also elephants and crocodiles. Fishes emerge from water while the sky is swarmed by eagles and herons. This is absolutely a non-human animal world represented in a romantic aspect where real and fabulous creatures are admitted. This romantic scene, a love of wild life is always manifest for their strangeness.[15]

In Mughal drawing of zoological subjects *Ustad* Mansur holds a legendary position. This celebrated artist began his artistic career in the reign of Akbar. He drew two hunting scenes in the Clarke MS of the *Akbarnama* and

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13 . S.P. Verma, ed.*Flora and Fauna in Mughal Art*, Marg , Bombay, 1999, pl. 8, p.19.
14 . Hasan, op.cit., p. 8.
15 . Ibid., op.cit., p. 9.

eight exquisite little miniatures in the Waqiat-i-Babri or *Baburnama*, now preserved in the British Museum. As Mansur was a very young man in Akbar's time, so his bird studies were not accurate, lively and forceful as those of his latter period under Jahangir. About *Ustad* Mansur, Jahangir remarks *"Ustad* Mansur has become such a master in painting that he has the title of *Nadir-ul Asr*, and in the art of drawing is unique in his generation".[16] Jahangir too had special interest in rare beautiful animals and frequently ordered his painters who always accompanied him on his journeys and campaigns to depict them. The Mughal studio was always preoccupied with nature and the animal world and devoted active interest in rendering accurate and lively studies of birds, beasts and flowers. Even in the such early works as the *Hamzanama*, the *Tuti nama*, in the school of oriental and African studies, *Anwar-i-Suhaili* and the Zodiacal and *Tilasm* MS in Rampur, pictures of birds and animals are painted with great care, accuracy and sympathy. Under Jahangir's patronage these became even more exacting because he wanted the studies true to life, and no one else but Mansur could fulfill that task so successfully. Soon he became the leading exponent of natural history drawings. A few pictures of birds and animals drawn by Manohar, Pidarath, Inayat, Govardhan, Hashim, Abul Hasan etc., have been found but the combined output of all of them will not be equal to even a small part of Mansur's production.[17]

A beautiful example of the fine bird and animal studies of Mansur is the remarkable picture of Fowl produced in the Mughal painting by Wilkinson. This charming piece is executed with skilful effective colouring and qualities

16 . Jahangir, *Tuzuk-i-Jahangiri*, tr. A. Roger and H. Beveridge, vol. II, London, 1914, p.20.
17 . A.K. Das, '*Ustad* Mansur', *Lalit Kala*, No. 17, 1977, p. 33.

of details, exhibiting life and character. Coomaraswamy attributes several animal and bird portraits namely zebra, black and white in appearance, a ram and two ducks to Mansur. Considering the depth of the studies, minuteness of details it is not unfair to attribute these pictures to the skillful hands of Mansur.[18]

The drawing of the *Shahi* falcon is of great interest as it appears to be the same drawing prepared by *Ustad* Mansur at the command of Jahangir in the fourteenth year of his reign.[19] Jahangir once stated about falcon which came directly from Persia : "What can I write of the beauty and colour of this falcon? There were many black markings on each wing and back and sides. As it was something out of the common, I ordered *Ustad* Mansur who has the title of *Nadir-ul-Asr* to paint and preserves its likeness".[20] This refers to falcon on a perch, an exquisite work of the finest finish and most delicate colour. The statement of Jahangir shows that drawing of birds after observation was practiced in order to apply life like appearance to the subject portrayed. This realism is never missed in Mughal art.(plate 33)

The study of the Himalayan cheer pheasant is a new addition to the drawings of the same bird existing in the collection of the Victoria and Albert Museum, London.[21] The last mentioned drawing is a reverse copy of the other version; the Victoria and Albert Museum example is signed by *Ustad* Mansur and Rothschilde drawing is unsigned. The cheer is a long-tailed west Himalayan pheasant, rather like the hen English pheasant to look at. It is buffy-

18 . J.V.S. Wilkinson, *Mughal Paintings*, Fabre Gallery of Art, Oriental Art, 1963, Pl. 1, p.3.
19 . Verma, op.cit., pl. 1.
20 . *Tuzuk*, op.cit., vol. II, p. 108.
21 . Das, op.cit., pl. 14, p. 26.

white and rusty brown, barred above and mottled below with black. The long, narrow pointed 'pheasant tail' broadly barred buff and brownish black, the narrow pointed lying down crest, and the bright scarlet patch round the eyes confirm its identity ... keeps is small coveys of five or six on precipituous hillsides on ravines covered with tall grass scrub and oak forest". This is by *Ustad* Mansur, who has drawn with utmost skill of a bird painter without avoiding pitiless details, such as, pigtail feathers, etc. This is undoubtedly a unique specimen of bird study.[22](plate 38)

Another example of a most careful and delicate study is evidently from nature, that of a Bengali Florican about which Jahangir leaves the fallowing note: "This is a picture of a bird called *Jurz-i-Bur*, painted by *Ustad* Mansur, the most remarkable painter of his time, written by Jahangir Akbar Shah in the year A.D. 1624". The picture of the Bengal florican is equally interesting.[23] Drawn with precise and minute lines and faint touches of colours it nevertheless depicts the bird so accurately that a modern ornithologist would hardly find any difficulty to identify it. It is not possible from the available evidence to identify the picture with any such birds described in the *Tuzuk*. The picture of a white crane reproduced in Havell's '*Indian sculpture and painting*' is a marvel of skilled workmanship and deep insight into wild life. The delicate features of the white plumage and the microscopic details of birds anatomy are drawn with scientific exactitude. Although unsigned it will not be far from truth to attribute this picture to Mansur.[24]

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22. Hasan, op.cit., p. 10.
23. Verma, op.cit., pl. 3, p. 15.
24. Hasan, op.cit., pl. 4, p. 7.

The painting of Turkey cock by Mansur is the finest example of its kind has not yet been surpassed by any other bird study of the period of Jahangir.[25] In the *Tuzuk-i-Jahangiri*, Jahangir has given a description of this bird. Jahangir received among other rare birds and animals from Goa, the Turkey cock from Muqarrab Khan, who had been sent to Goa on a mission. "Among them", says Jahangir, "were a few animals which excited my curiosity and which I had never seen before... as the animals now before me were of such exquisite rarity, I wrote a description of them and ordered that their pictures should be drawn in the *Jahangirnama* with the view that their actual likeness might afford a greater surprise to the reader than the mere description of them. One of the birds resembled a peahen but was a little larger in size though less than a peacock. His back and feet resembled those of a barn-door fowl. His head, neck and throat changed their colour every minute but then anxious to pair he became a perfect red and seemed to be a beautiful piece of coral. The piece of flesh which is attached to his head looks like the comb of the cock. But the curious part of it was that piece of flesh when he was about to pair, hang down a span long like the trunk of an elephant".[26] The picture of the Turkey cock was drawn by Mansur perfectly in the state of pairing as described by Jahangir. (Plate 37)

The illustration of Mayna, now in the Prince of Wales Museum, belonging to the first quarter of the 17th century is vividly portrayed in a most alerted mood.[27] This is a true representation of an Indian bird study unlike the turkey cock, whose origin is traced from different sources. Smith regards the

25. Hasan, op.cit., pl. 4, p. 7.
26. *Tuzuk*, op.cit., vol. II, p. 150.
27. Hasan, op.cit., pl. 5, p. 7.

turkey as Chinese rather than Indian. Although peacock is a very familiar object of visit in India, the curious turkey cock is undoubtedly an importation into India through the Portuguese held Goa. Jahangir's keen sense of appreciation of wild life is proved by the illustration of four birds, executed by Iklas. During his summer journey to Kashmir the Emperor Jahangir took immense delight in observing and examining the new birds and flowers. The illustration of four birds invites curiosity from all quarters and betrays the artist's complete control over representing strange birds, sometimes based on hearsay. The upper pair have the outline of a pigeon but the tail and colouring of blue magpies. The lower pair manifest the general appearance of wattled pheasant but the colouring of a manual. All these curious combinations betray the fact that they were not drawn from life but only to mitigate the Emperor's ever-increasing zeal for the rare birds.[28]

The birds play no less important role than the animals as proved by the innumerable delineations of the different species of the birds. In the painting of the "*Chenar* tree with squirrels", besides a landscape with Persian animals and forms, such as goats, there are squirrels playing with their moving tails which are decidedly Indian, executed with great compassion and skill by Abul Hasan.[29]

Mansur is also credited with the representation of the "Himalayan Blue throated Barbet", a marvel of gift in Jahangir's aviary, brought from Kashmir, and the Indian Red wattled Lapwing, both of the period of Jahangir which are masterpieces of animal studies.[30]

28. Ibid, pl. 6, p. 7.
29. Ibid, pl. 7, p. 8.
30. Verma, op.cit., pl. 4, p. 16.

In the field of bird and animal painting *Ustad* Mansur acquired the role of the legendary hero as painter, recalling Bihzad's leadership in the promotion of Persian paintings technique, and his name is associated with any unsigned good independent paintings of bird and animal drawing. Some of the finely drawn independent painting of birds and animals which are attributed to him are the "Indian fallow deer and Tibetan Antelope", executed from living specimens kept in one of the Jahangir's deer-parks; *Nilgai* (Blue-bull) standing on a low field an example of sensitive animal drawing.[31]

Mansur was really a past master in the art of animal and bird paintings. None excelled him in the "harmonious ordered version" of the living birds with their moods, anatomical structures and colour scheme. This is exhibited in the drawing of "zebra" brought from Abyssinia in 1621. Archer observes "Although no dissectionist, Mansur, seems to have had the same innate understanding of animal physique and power of expressing majesty and strength.[32](plate 39)

An unsigned charming picture having faithful reproduction in their colouring of the plumage is the album of Jahangir in the State Museum of Berlin, "Two Magpies" placed happily in a lucid and appropriate background. "It reminds one of the Dutch specialist painters of the seventeenth century who portrayed subjects from the animal kingdom with equal knowledge, but their paintings are seldom so full of feeling as this one from India".[33]

A novel theme of animation to animal life is introduced by the vividly portrayed animal drawings of "Two fighting camels". Following the old Indian

31 . Hasan, op.cit., p. 11.
32 . Verma, op.cit., pl. p.
33 . Shanti Swarup, *Flora and Fauna in Mughal Art*, Taraporevala, Bombay, 1983, pl. 34, p. 28.

traditions of animal fight already noticed in the frescoes of Ajanta, such as "Bull Fight", the theme is nothing striking but the animals are foreign to Indian painting world and the mobility and vivacity of the fighting animals enhance dramatic effect. There is an amazing mastery over pitiless precision of details. While Khandalavala attributes it to Nauha, Rai Krishnadasa suggests that "tour de force" in animal painting to Manohar.[34]

A peculiar drawing of "Himalayan wild goat" with spirally twisted horns from Kashmir is executed by Inayat which shows close affinity with the environment and the typical animal qualities of a hideous goat.[35](plate 40)

Jahangir notes in the *Tuzuk* that the number of pictures painted by Mansur at his command would exceed 100. Of this large number only a few seem to have survived of which the well known picture of glittering red-tulip like flowers, full blown and bud and a butterfly of many hues in the collection of Sitaram Shahu of Banaras bears his signature.[36]

The skilled draughtmanship of the Mughal artists in drawing birds and animal paintings is also revealed in the manuscript illustration of *Anwar-i-Suhaili* dated 1610-11, in the court of Jahangir, now in the British Museum. Executed by ten Hindu and six Muslim artists, the MS is a veritable record of the rich illustrations of animal and bird species in their full bloom, wood and actions, suited to them most. In the picture of the crow in the "assembly of birds", the artist had exactly brought forward a perfectly jealous atmosphere of election campaign in which the crow is condemning the proposal of the

34. Ibid,pl. 107, p. 50.
35. Ibid, pl. 108, p. 56.
36. Das, op.cit., p. 34.

leadership of owl, which is executed in a wood expressing resentment and excitement. All the birds have received faithful and life like appearance and potential vitality of their natural characteristics as species of the aviary by the minute accuracy and unmistakable colour scheme of the artist *Ustad* Husain.[37]

There is an exquisitely charming picture of a "Bullock chariot" drawn by Abul Hasan (*Nadir-uz-zaman*). The illustration of bull is nothing new in Indian sculpture and painting. Nandi a milk white bull, the vehicle of Shiva is carved at Mamallapuram. Mehta is of opinion that the body of the bull is drawn after Indian manner, including the hump, bulk, tail, ringing in the legs. Chain in throat, whereas head, horn and facial expression are drawn after Chinese fashion. There is hardly any shadow of doubt that the subject matter is inherently Indian.[38]

The Album of Dara Shikoh in the India Office Library is the unique sizes reflecting the highest achievement of Indian draughtmanship and colouring. In the portraits of men and favourite animals a little shading; executed by a few delicate strokes was dexterously introduced sufficient to suggest solidity and roundness. The illustration of *Dilpasand* or Heart's Delight, a favourite Charger of Dara Shikoh by an artist named Manohar is remarkable. But the most striking of all is the drawing of a "pair of ducks" in colour. Vincent Smith has reproduced a little marvel of real bird life in its accurate panoramic setting. The side of the pool at the foot of the hillock with flying birds fluttering over the sky is well-fitted in a scene of wild bird life. The close affinity between nature and life, the intimate characterization of the

37. Swarup, op.cit., pl. 31, p. 26.
38. Hasan, op.cit., p. 12.

zoological portraiture, combined with gaudy colour scheme make this picture unique in the realm of bird studies.[39]

The Mughal art may fairly be described as purely secular, mainly concerned with the pomp and vanity of court life. These animal and bird studies are drawn for exciting admiration and aesthetic pleasure of the patron. They are nothing more than idle amusement; sometimes they are executed as highly finished mechanical decorative designs. They are not studied as objects of veneration or symbols of worship as we notice in the ancient Indian sculptures and paintings. There is hardly any inherent idea behind all these studies of birds and animals. Mughal art is aristocratic in outlook and as a matter of fact in approach. The studies of wild life are frankly material, intended to give early pleasure. The Mughal artist was concerned with the expressions of a visual experience as against "the attitude of the old Indian artist who took much pain to portray realistically his mental concepts". The Mughal artist followed the path laid down by the Mughal patrons and the European art, which was realistic in reference to an artists' visual experience.[40]

Mughal miniatures widely recognized for scientific precision and immaculate accuracy with minutest possible detail reveal the historic pictures of nature history. These make a fine source for the study of flora and fauna with exactitude. Need not to say that great ornithologist like Salim Ali have made extensive use of Mughal miniature to discover an extinct bird "dado" and other species of birds to construct related details. Likewise, Divyabhanusinh Chavda in his book, *The End Of a Trail, Cheetah* (New Delhi, 1999) has

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39. Swarup, op.cit., pl. 146, p. 61.
40. Hasan, op.cit., p. 13.

widely noticed Mughal miniatures containing the depiction of *Cheetah.* Mention may also be made of A. Rahman and M. A. Alvi who extensively refer to the Mughal paintings of birds, animals, plants and trees in their study *Jahangir the Naturalist.* Above monumental works establish a great relevance of Mughal pictures of flora and fauna. Their historical relevance is still great since numerous plant and animals' studies yet remain to be identified and described as botanical and zoological studies. In this direction, a study of Mansur's famous pictures "The Tulip and Butterfly" (Habibganj Collection, Aligarh Muslim University) by S.P.Verma is rewarding. Could we say then that a great challenge lies ahead us in granting Mughal pictures a formal status as an indispensable source of nature history.

Conclusion

CONCLUSION

Alongside human history, the wild life is equally a very delightful subject of study in history. This is a historical fact that the wild life had been a wonderful part of the Mughal rule in India. There are some pioneer works done by different scholars like Salim Ali, Divyabhanusinh Chavda, S.K. saraswati, and M.A.Alvi which feature this aspect. Nevertheless, present work is different from others since it deals with various aspects of wild life related to different themes such as hunting, animal fights, catching of animals and birds, depiction of flora and fauna in illustrated manuscripts and albums, and in the surface embellishment of the buildings, different features of gardens, herbs and medicinal plants, management and breeding of various animals, and pictures of different animals and birds, which were depicted particularly in the Mughal miniatures, etc.

The flora and fauna of India was quite wonderful for Babur. Babur inherited a love for wild life and the nature in general. Both of his ancestors, Timur and Chingez were fond of hunting and passing their times in natural environs and garden landscape settings particularly during their expeditions. Nevertheless, Babur had a great zeal and affection for the natural beauty, of which he writes in his Memoir. During his advance towards Panipat in AD 1526 Babur passed through different parts of India and he closely observed many things in the surroundings, viz. forests, flowers, fruits, birds and animals of this country. After establishing his rule in India Babur took special interest in creating beautiful gardens like Aram *Bagh*, *Bagh-i-Wafa* (Garden of Fidelity) and others. Side by side he kept on his hunting operations, because it was his favourite pastime. Similarly, the Jahangir was another great naturalist

among the Mughals. In his *Tuzuk-i-Jahangiri* he describes a number of birds like parrot, falcon, *saras*, duck, peacock, swallow, crow, *bulbul*, *koel,* etc. In the same way he writes about a number of animals like rhinoceros, deer, elephant, horse, blue-bull, antelope, wild buffalo, goat, sheep, camel, lion, *cheetah*, dog and monkey, etc. He domesticated a number of birds and animals and kept them under an organised management system for the purpose of breeding and rearing, etc. He had a great affection for nature and created beautiful gardens like Nishat *Bagh*, Shalimar *Bagh* and many more which are best examples of his interest in flora and fauna.

Apart from these personal interests, the Mughal Emperors like Akbar and Jahangir played a very remarkable role to maintain the images of flora and fauna in the form of paintings. The paintings of Mughal period depict wild life in the form of manuscript illustrations, album pictures, and margin paintings. These miniatures exhibit a great variety of flora and fauna. During the time of Akbar some painters like Basawan, Daswant, Lal and Miskin, etc. made a number of paintings on nature history. The paintings of *Baburnama, Akbarnama, Anwar-i-Suhaili and Ajaib-al-Makhluqat* are the wonderful examples of art which depict a variety of flora and fauna. During the time of Jahangir the art of painting depicting natural life reached its zenith. Such paintings give a comprehensive glimpse of wild life and the result of the most intimate and careful observation of the subject. During Jahangir's period a large number of pictures of birds and animals, mostly ascribed to Mansur, Manohar, Inayat, Pidarath and Abul Hasan, were executed. These painters contributed a lot to the depiction of the flora and fauna in the naturalistic form. The themes related to hunting, animal-fights and trapping of birds and animals, etc., appear in context of their references in a particular event or episode

described in the chronicles. Some of the finest examples of these paintings are the illustrations from the *Baburnama*(f.305b, B.M., London) a hunting scene in which Babur riding on the horse back is looking at the hunted rhinoceros; the *Akbarnama* (Acc.55-56/117, double page, V.A. Museum, London) exhibiting a *Qamargah* hunting scene in which Akbar riding on the horse hunts the black buck near Lahore; and finally the *Jahangirnama* (Ed.win Binney, 3rd collection, Sen Deigo). The latter depicts both Jahangir and prince Daniyal looking of a pair of *Nilgai* shot by them. These miniatures form the best part of the source material for knowing about the wild life in Mughal period.

The hunting and other sports also brought or derived to the Mughals very close to the flora and fauna. At the time of hunting operations they got an opportunity to look at the different wonderful aspects of the wild life. Right from Babur till Aurangzeb's time, hunting had been a favourite pastime and interesting source of entertainment for the Mughals. Akbar and Jahangir were very fond of tiger and lion hunting. Apart from these animals they used to hunt other animals like deer, blue bull, wild buffalo and different kinds of birds. Royal ladies like Nur Jahan also participated in hunting operations. It has been mentioned in the Mughal sources that they used mostly guns, matchlocks, spears, swords, bows and arrows for hunting. In general, the Mughals enjoyed hunting as a big game of that time.

Another beautiful aspect of the wild life in Mughal India was the keen interest of the Mughal emperors which they showed in their surface decoration of the architecture by preserving the images of the flora and fauna. The forms of the flowers, plants, birds and animals appear to have been beautifully painted and carved in their buildings like the dados of *Kutub Khana* at Fatehpur

Sikri, Akbar's tomb at Sikandara, Taj Mahal, Agra Fort, and in many other buildings. The lawns and gardens were also created around these buildings which provided shelter to a number of birds and animals. Many flower, plants and fruit trees were planted there to keep the surrounding cool and afresh.

The zeal of the Mughal emperors reached on its zenith when they continued the tradition of their ancestors to create beautiful gardens in India. Though the climate of India has different forms but Babur and other Mughals found it favourable for the purpose of beautiful gardens. Babur introduced the *Chahar-bagh* ("Fourfold Garden") system. He was inspired by the gardens of his ancestors at Kabul, Herat, and Samarkand. The Mughal gardens were based on the concept of Paradise gardens which are described in Holy Quran. Eventually Babur designed his first garden Aram *Bagh* at Agra. Similarly the Emperor Jahangir also created gardens like Shalimar garden, Nishat garden, etc. in Kashmir. All these gardens were created in systematic way comprising water channels, water tank (*hauz*) and trees like *chinar*, *pipal,* mango, plantain, cypress, etc. A number of flowers, plants and trees of fruits were planted in partresses in these gardens which show the deep affection of the Mughals for flora and fauna, and the nature, in general.

The Mughals also used the flowers, plants and trees in the form of herbs and medicines to cure several diseases. It is notable that during the sixteenth and seventeenth century the Indian and European system of medicine came into close interaction.

The most important aspect of the wild life in Mughal India was the management, treatment and breeding of the birds and animals. During Mughal period, particularly the reign of Akbar and Jahangir a number of animals like

elephants, *cheetahs*, horses, camels, dogs, deer, mules, buffaloes, goats, sheep, cows were kept under a management system for different purposes like, hunting, animal-fights, domestication, breeding and rearing, etc. Apart from these animals a number of birds like, falcon (*baz*), hawks, *saras*, crane, parrot, duck and peacocks, etc. were also kept for different purposes. A number of experiments regarding, hunting, animal fights, breeding, entertainment and understanding of the behaviour of these birds and animals were done during this period. All the birds and animals were kept under a management system and a number of servants were appointed to provide considerable food to them. Abul Fazl mentioned that Akbar made the categories of each animal. Similarly Jahangir also played a remarkable role to keep the birds and animals for different purposes.

Mughal miniatures depicting wild life appear to be visual evidence for studying various kinds of animals and plant especially the curious ones brought from different parts of India such as Goa, Kashmir and also from other countries. The turkey cock, spotted forktail, *shahi* falcon, zebra, black buck , Himalayan blue throated barbet and Bengali florican, were the favourite animals, likenesses of whom were painted by different painters at the Mughal studio.

To sum up, the Mughal India had been very favourable for the relationship between the man and nature. The Mughal emperors were great lovers of nature, they had qualities of the naturalists, environmentalists, and had an artistic approach and a, scientific attitude, towards the wild life which made it an important and an integral experience of medieval India.

Appendix

MANAGEMENT SYSTEM OF ANIMALS & BIRDS IN MUGHAL INDIA

In the Mughal Empire, the animals and birds were taken care in a very systematic way, there were special arrangements of food, ornaments and servants were also hired for the proper care of them. In that period, the food was provided to the elephants according to their category, capacity, age and size. Each class was divided into three subdivisions, viz., large sized, middle, and young ones; the last class contained ten kinds. A certain quantity of food was fixed for each class. Previously the elephants were not categorized that is why a large quantity of food and fodder was wasted upon them. But when Akbar noticed this, he inquired into the matter and issued wise regulations for guidance to provide food properly.[1]

Each male and female was given food according to its size quality and capacity which is given as (1). *Mast* elephants – large ones got daily 2 mans 24 sers, middle sized, 2 m.19 s., small ones, 2 m. 14 s., (2) *Shergirs*. Large ones, 2 m. 9 s., middle sized ones, 2 m. 4 s., small ones, 1 m. 9 s., (3) *Sadas* – large ones, 1 m. 34 s., middle sized ones, 1 m. 39 s., small ones, 1 m. 24 s., (4) *Manjholas* – large ones, 1 m. 22 s., middle sized ones, 1 m. 20 s., small ones, 1 m.18 s., (5) *Karhas* – large ones, 1 m. 14 s., middle sized ones, 1 m. 9 s., small ones, 1 m. 4 s., (6) *Phandurkiys* – large ones, 1 m., middle sized ones, 36 s., small ones – 32 s., (7) *Mokals* – large ones, 26 s., middle sized ones, 25 s., third class 22 s., Fourth class, 20 s., fifth class, 18 s., sixth class, 16 s., seventh class, 14 s., eight class, 12 s., ninth class, 10 s., tenth class, 8 s.[2]

Similarly, the female elephants were also divided into four classes, i.e. large ones, middle sized ones, small ones, and *mokals*. The first two class were again divided into three, the third into four, the fourth into nine subdivisions (1)

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1. Abul Fazl, *Ain-i-Akbari*, tr. H. Blochmann, vol. I, New Delhi, 1977-78, p. 132.
2. Ibid., p. 132.

Large ones or big ones got 1 mans, 22 s.; middling 1 m, 18 s.; small ones, 1 m. 14 s.; (2) middle sized ones. Big 1 m. 10 s.; middling, 1 m., 6 s.; small 1 m. 2 s.; (3) small ones. Big, 37 s.; middling 32 s.; small 27 s., still smaller, 22 s.; (4) *Mokals* – first class, 22 s.; second 20 s.; third 18 s.; fourth 16 s.; fifth 14 s.; sixth 12 s.; seventh, 10 s.; eighth 8 s.; ninth 6 s. This was the division of the food material which was provided to the elephants time to time.[3]

Since Akbar had been very fond of this animal and collected it in a large number, he appointed many elephant-keepers to look after them. A proper rank was assigned in such a manner as he had proper knowledge of the animal. The servants of the elephant stables were divided according to their seven divisions, and a *Mahawant* was assigned to each elephant. These classes were as, 1. ***Mast*** **elephants** – there were five and a half servants for each including a *Mahawant*, who sit on the neck of the animal and directs it movements. He was acquainted with good and bad qualities of this animal and thus, contributed much to its usefulness. He got 200 *dams* per month, but if the elephant used to be a *khutahar*, i.e., wicked and addicted to pulling down the driver, than he got 220 *dams*. Secondly, a *Bhoi*, who sits behind, upon the rump of the elephant, and assists in battle and in quickening the speed of the animal, but he often performed the duties of *Mahawant*. His monthly pay was 110 *dams*. Thirdly, the *Meths*, of whom there were three and one half, or only three in case of small elephants. The *Meth* used to fetch fodder, and assisted in caparisoning the elephant. *Meths* of all classes got on the march four dams daily, and at other times three and a half.

2. *Shergir*: For every *Shergir*, there were five servants, and a *Mahawant* appointed at 180 *dams*, a *bhoi* at 103 *dams* and three *Meths* as before.

3. *Sada*: For every *sada*, there were four and a half servants, and a *Mahawant* at 160 *dams*, 9 *Bhois* at 90 *dams*, and two and a half *Meths*.

3. Ibid., p. 132.

4. ***Manjhola***: For every *Manjhola*, there were four servants, a *Mahawant* at 140 dams, a *Bhoi* at 80 dams and two *Meths*.

5. ***Karha:*** For every '*Karha*', there were three and a half servants, and a '*mahawant*' at 120 *dam*, a *Bhoi* at 70 *dam* and one and a half *Meths*.

6. ***Phandurkiya***: For every *Phandurkiya* there were two servants, and a '*Mahawant*' at 100 *dam*, and a *Meth*.

7. ***Mokal*** : For every '*Mokal*' there were likewise two servants and a '*Mahawant*' at 50 dam, and a '*Meth*'.

Special arrangements of servants and caretakers were made for female elephants too. 1. The large sized female elephant had four servants, and a '*Mahawant* at 100 *dams*, a *Bhoi* at 60 *dams* and two *Meths*. 2. Middle sized ones had three and a half servants and *a Mahawant* at 80 *dams*, a *Bhoi* at 50 *dams*, and one and a half *Meths*. 3. The small ones had two servants and a *Mahawant* at 60 *dams*, and a *Meth*. 4. *Mokals* had likewise two servants, and a *Mahawant* at 60 *dam*, and a *Meth*.[4]

Akbar appointed a superintendent over every troop of ten, twenty, and thirty elephants. Such a troop was called a *halqa*, the superintendent was called *Faujdar*. His business was to look after the condition and the training of the elephants. He used to teach them to be bold, and to stand firm at the sight of fire and at the noise of artillery, and he was responsible for their behaviour in these respects. There were other officers also like *sadi* (a commander of one hundred), *Bistis* (a commander of twenty), *Dahbas*his (a commander of ten) and *Hazaris* (commanders of one thousand) etc.

The above arrangement regarding the servants was not thought sufficient by Akbar, who had much experience in this matter. He therefore put several *halqas* in the charge of every grandee and required him to look after

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4. Ibid., p. 133.

them. The fodder also had been supplied by the government. Besides, a trustworthy clerk was appointed, who was the in charge of correspondence of this branch who looked after the receipts and expenditure and saved that the orders of Akbar are carried out. He also paraded the elephants in the order.[5]

It was very interesting to maintain and to keep these elephants properly. A number of equipments were there for the maintenance of these elephants. We have information of a considerable number of these equipments which are following :

1. The *Dharma* was a large chain, made of iron, gold or silver. It was made of sixty oval links, each weighing three *sers*, but the chain differed in length and thickness according to the strength of the elephant. One end of the chain was fixed in the ground, or fastened to a pillar; the other end was tied to the left hind leg of the elephant. Formerly, they fastened this chain to the forefoot, but as this was injurious for the chest of the elephant Akbar ordered to discontinue the use of it.
2. The *Andu* was a chain, with which both forefeet were tied. As it annoyed the elephant, Akbar ordered it to be discontinued.
3. The *Beri* was a chain for fastening both hind feet.
4. The *Baland* was a fetter for the hind feet, an invention of Akbar. It allowed the elephants to walk, but prevented him from running.
5. The *Loh langar* was long chain, suitable for an elephant. The chain twists round his leg, and the log will annoy the animal to such extent that it necessarily stops. This useful invention, which has saved many lives, and protected huts and walls, was also introduced by Akbar.
6. The *Charkhi* was a piece of hollowed bamboo half a yard and two *tassujes* long, and had a hole in the middle. It was covered with sinews and filled with gunpowder and used formerly, in order to separate two elephants that

5. Ibid., pp. 133-34.

were fighting, they used to light a fire, but people had much trouble, as it seldom had the desired effect. Akbar invented the present method, which was hailed by all.

7. The *kanar* was a small pointed spike, half a yard long. This they likewise attached to the *kalawa*, and prick the elephant's ears with it in order to make the animal wild or to urge it on.

8. The *Pichwa* was a belt made of ropes and was fastened over the buttocks of the elephant. It is a support for the *Bhoi*, and of much use to him in firing.

9. The *Pakhar* was like an armour, and was made of steel, there were separate pieces for the head and the trunk.

10. The *Gaj jhamp* was a covering put as an ornament above the *pakhar*. It looks grand. It was made of three folds of canvas, put together and sewn with broad ribbons being attached to the outside. Besides these there were several other ornaments and equipments like *Gaddh beri, Andhiyari, Kilawa, Dulthi, Dor, Gadela, Gudauti, Qutas, Gateli, Ankus,* and *Gad* etc. But it is impossible to describe all the equipments and ornamental trappings of elephants.[6]

For each *mast* and *shergir* and *sada,* seven pieces of cotton cloth were annually allowed, each at a price of 8½ *dams*. Also, four coarse woolen pieces, called in Hindi *Kambal* (blanket), at 10 d. each, and eight ox hides, each at 8 d. For *Manjhola* and *Karna* elephants, four of the first, three of the second, and seven of the third, were allowed. For *Phandurkiyas,* and *Mokals*, and female elephants, three of the first, two of the second, four of the third. The saddle was made of cloth, lining, and stuff for edging it round about, for sewing, half a ser of cotton thread way allowed. For every man of grain, the *halqa-dar* was allowed ten *sers* of iron for chain, etc., at 2 d. per *ser*; and for every hide, one *ser* of sesame oil, at 60 d. per *man.* Also 5 s coarse cotton threads for the

6. Ibid., pp. 134-136.

kalawa of the elephant on which the *Faujdar* used to ride at 8d per ser, but for other elephants, the men had to make one of leather, etc. at their own expense. A sum of twelve dams was annually subtracted from the servants, but they got the worn out articles.[7]

Besides all these elephants there were some other elephants especially for the use of the Akbar. They were called *khasa* elephants. Abul Fazl described that there were one hundred and one elephants selected for the use of Akbar'. Their allowance of food was the same in quantity as that of the other elephants, but it differed in quality. Most of them also got 5 s. of sugar, 4 s. of *ghee*, and half a *man* of rice mixed with chilies, cloves etc. and some had one and a half man of milk in addition to their grain. In the sugarcane season, each elephant got daily 300 sugarcanes, for two month more or less and the Emperor used to take place of the *Mahawant*.

Each elephant required three *bhois* in the rutting season, and two, when cool. Their monthly wages varied from 120 to 400 d., and were fixed by emperor himself. For each elephant there were four *Meths*. In the *Halqas*, female elephants were but rarely told off to accompanying big male ones, but for each *Khasa* elephant there were three and sometimes even more appointed. First class big female elephants had two and one half *Meths*, second class do, two, third class do., one and one half; for the other classes as in the *Halqas*.

As each *Halqa* was in the charge of one of the grandees, so was every *Khasa* elephant put in charge of one of them. Likewise, for every ten *Khasa* elephants, a professional man was appointed, who was known as *Dahaidar*. They drew twelve, ten and eight rupees per mensem. Besides, an active and honest superintendent was appointed for every ten elephants. He was known as *Naqib* (watcher) and he had to submit a daily report specially, when elephants

7. Ibid., p. 136.

ate little or got a shortened allowance, or in cases of sickness, or when anything unusual happened.[8]

In order to prevent laziness and to ensure attentiveness Emperor Akbar, as for all other departments, had fixed a list of fines. On the death of a male or a female *khasa* elephant the *bhois* were fined with three months wages. If any part of the harness was lost, the *bhois* and *Meths* were fined two thirds of the value of the article, but in the case of a saddle cloth they had to pay the full price, when a female elephant died from starvation, or through want of care, the *Bhois* had to pay the cost price of the animal.[9]

It is very interesting that like all the arrangements of the elephants, the emperor tried to keep the *cheetahs* and provided food to them properly. The *cheetahs* were categorized into the eight classes and the food was given according to its class. The first class *cheetahs* got 5 *ser* of meat every day, second class, 4½ s., third class, 4 s., fourth class 3¾ s., fifth class 3½ s., sixth class 3½ s., seventh class, 3s., eighth class, 2¾ s. The meat was given in a lump, and as on Sundays no animals were killed, so double the daily portion was given on Saturdays. Previously every six months, but now annually, four *sers* of butter and one-tenth of a ser of brimstone were given as ointment, which prevented itch.[10]

There were four men appointed to train and look after each *cheetah*, but now there were three men told off for such *cheetahs* as used to sit on horses, when taken to the hunting ground, and only two for such as sit on carts and on *dolies*. The wages of the keepers varied from 30 Rs. to 105 Rs. per mensem, but they had at the same time to look after the cattle which drew the *cheetah* in the carts. The servants who looked after the cattle were divided into seniors and juniors, each class being subdivided into five divisions. The seniors got 300 d., 260 d., 220 d., 200 d, and 180 d., which were the lowest allowance, while the

8. Ibid., p. 137.
9. Ibid., p. 139.
10. Ibid., pp. 297-98.

juniors got 160 d., 140 d., 120 d., 110 d., and 100 d. For the sake of show, the *cheetah* got brocaded saddle cloth; chain studded with jewels, coarse blankets and *Gushkani* carpets to sit on. Each *cheetah* had a name which indicated some of his qualities. Every ten leopards form a *Misl* or *Taraf* (set), were also divided according to their rank as follows. There were one thousand *cheetahs* were kept in the park of Akbar and an interesting encampment was formed. The best *cheetah* which was named *samand-manik*, was carried on a *chau-dol*, and preceded with much pomp. His servants were fully equipped, run at his side, the *naqqara* (a large drum) was beaten in front and sometimes he was carried by two men on horseback. A tame, trained *cheetah* had the *doly* carried by three men, others by two.[11]

The considerable quantity of food was given to the horses accordingly. *A khasa* horse was formerly allowed eight *sers* fodder per diem, when the ser weighed twenty eight dams and after that the ser was fixed at thirty dams now a *khasa* horse got seven and a half *sers*. In winter, they gave boiled peas or vetch while in summer, grain. The daily allowance was included with two *sers* of flour and one and a half *sers* of sugar. In winter, before the horse got fresh grass, they gave it half a *ser* of *ghee*. Two dams were daily allowed for hay, but hay was not given when fresh grass was available. About three *bighas* of land yielded sufficient fodder for a horse. When, instead of sugar, the horses got molasses, they used to stop the *ghee*, and during the season of fresh grass they gave no grain for the first three days, but allowed afterwards six *ser* of grain and two *sers* of molasses per diem. In other Iraqi and Turki stables, they gave the grain boiled, an allowance of one *dam* being given for boiling one *man* of it. The horses also used get once a week a quarter *ser* of salt. In winter, each horse got a *bigha* of fresh oats, the price of which at court was 240 d, and in the country 200 d. At the time of fresh oats, each horse got two *mans* of molasses, the same quantity being subtracted from the allowance of grain. Experienced officers, attached to the Imperial offices, calculated the amount required and

11. Ibid., p. 300.

made out an estimate, which in due course was paid when a horse was sick, every necessary expense was paid on the certificate of the horse doctor.[12]

There were a number of articles and ornaments used for these horses. It is difficult to describe the various ornaments, jewels, and trappings, used for the *khasa* horses on which the emperor Akbar used to ride. For the whole outfit of a *khasa* horse, the allowance was 277½ d. per annum, i.e., an *Artak*, or horse quilt, of wadded chintz, 47 d., a *yalposh* (a covering for the name), 32 d., a woolen towel, 2d. – these three articles were renewed every six months, in lieu of the old *artak*, half the cost price was deducted, and one sixth for the old *yalposh*, a saddle cloth, the outside of which was woven of hair, the lining being felt, 42 d., halters for the *nukhta* (headstall) and the hind feet, 40 d., a *pusht tang* (girth), 8 d., a *magasran* (a horse tail to drive away flies), 3d., a *nukhta* and *qayza* (the bit), 14 d., a curry-comb, 1½ d., a grain bag, 6 d., a basket, in which the horse got its grain, 14 d. These articles were given annually, and fifteen *dams*, ten *jetals*, subtracted in lieu of the old ones.

In the other stables, the allowance for horses whose value was not less than twenty-one *muhurs*, was 196½ d per annum, the rate of the articles being the same. Twenty five and a half dams were subtracted in lieu of the old articles.

In the stables of horses worth twenty to eleven *muhurs*, the annual allowance was 155 ¼ d., i.e., for the *Artak*, 39¾ d., the *yalposh*, 27 ¼ d. a coarse saddle cloth, 30 d., the girth, 6 d., the *nukhta* and *qayza*, 10 d., and the *nukhta* ropes and feet ropes, 32 d., the *magas-ran*, 2 d., a towel, 1½ d., a curry-comb, 1 ¼ d., a basket, 1 d, a grain bag, 4½ d.etc. Twenty *dams* were subtracted for the old articles.[13]

This management and maintenance of the horses was a unique feature. A large number of officers and servants were appointed for the keeping of the

12. Ibid., pp. 143-44.
13. Ibid., p. 145.

horses. These officers and servants performed their duties like wise 1. The *Atbegi* was incharge of all horses belonging to the government. He directed all officers charged with the management of the horses. This office was one of the highest of the state, and was only held by grandees of high rank, at present it was filled by the *Khan Khanan* (commander-in-chief), 2. *Darogha* There was one appointed for each stable. This post may be held by officers of the rank of commanders of five thousand down to senior *Ahadis*. 3. The *Mushrif*, or accountant, he kept the roll of the horses, managed all payments and fines used to see that Emperor Akbar's orders were carried out or not and prepared the estimate of the stores required for this department. He was chosen from among the grandees. 4. The *Dida-war*, or inspector, his duty was occasionally to inspect the horses before they were mustered by Emperor Akbar, he also determined the rank and the condition of the horses. His reports were taken down by the *Mushrif*. This office may be held by the *mansabdars* or *Ahadis*. 6. The *Chabuksuwar* used to ride on the horses, and his work was to compare their speed with the road, which was like wise taken down by the *Mushrif*. He received the pay of an *ahadi*. 7. The *Hada*. This name was given to a class of Rajputs, who taught horses the elementary steps. Some of them got their pay on the list of *Ahadis*. 8. The *Baytar*, or horse doctor, got the pay of an *Ahadi*. 9. The *Naqib*, or watcher. Some active intelligent men were retained for supervision. They reported the condition of each stable to the *Darogahs* and the *Mushrif*, and it was their duty to have the cattle in readiness. 10. The *Abkash*, or water carrier. Three were allowed in the stables of forty, two in stables of thirty, and only one in other stables. His monthly pay was of 100 d. 16. The *Farrash* (who dusts the furniture). There was one in every *khasa* stable. His pay was 130 d. 11. A *sipandsoz* was only allowed in the stables of forty horses, his pay was 100 d. 12. The *khakrub*, or sweeper. Sweepers were called in Hindustan as *Halalkhur*, Akbar brought this name envogue. In the stables of

forty, there were two, in those of thirty and twenty, was only one. Their monthly pay was 65 *dams*.[14]

Akbar also implemented the system of fine in the cases of the horse stolen, injury, and death. If a *khasa* horse died, the *Darogha* had to pay one rupee, and the *Mirdaha* ten d., upon every *muhur* of the cost price, and the grooms had to lose one-fourth of their monthly wages when a horse was stolen, or injured, Akbar himself determined the fine, as it could not be uniformed in each case.

In the other stables they exacted from the *Darogha* for a single horse that dies, one rupee upon every *muhur*, for two horses, two rupees upon every *muhur,* and from the *Mirdaha* and the grooms the above proportions. But now they had to take one rupee upon every *muhur* for one to three horses that die, and two upon every *muhur* for four horses, and three upon every *muhur* for five.If the mouth of a horse got injured, the *Mirdaha* was fined ten dams upon every *muhur*, which fine he used to recover from the other grooms.

The emperor made proper arrangements of food for the camels. Both male and female camels got according to their age and capacity. The camels which were used for burden and traveling were called '*bughdis*'. These *bughdis* at the age of two and a half, or three years particularly, when they were taken from the herd of the stud *dams*, got 2 s. of grain, when they were three and a half or four years old then they got 5 s. and upto the age of seven years got 9 s. and at the age of eight years got 10 *sers*. The same rule was applied to *bughurs*. Similar things were done in the case of *bughars jammazas*, *ghurds*, *magah* and *loks* upto four years of age. But from the fourth to the seventh year, they got 7 s., and at the age of eight years, 7½ s., at the rate of 28 *dams* per *ser*. As the ser had then 30 *dams* and a corresponding deduction was made in the allowance. When *bughdi* camels were in heat, they used to eat less food and the concession were made for them. If they got lean than 10 s. of food material

14 . Ibid., p. 148.

was given to them which was fixed according to the provisions of the *Pagusht* rule at the court. The government also provided grass to the camels for eight months. The camels on duty inside the town were daily allowed grass at the rate of 2 *dams* per head, and those outside the town got it for, 1½ *dams*. While during the four rainy months, and on the march, no allowance was given, so the drivers used to take the camels to the meadows to graze the grass.[15]

A number of articles were used to keep these camels properly and safely. The following articles were allowed for '*khasa*' camels : an *Afsar* (head stall), a *Dum afsar* (crupper), a *Mahar kathi* (furniture resembling a horse – saddle, but rather larger – an invention of emperor Akbar), a *kuchi* (which serves as a saddle cloth, a *qatarchi*, a *sarbchi*, a *tang* (a girth), a *satrang* (a head-strap), a *sherband* (a lion-strap) a *jalajil* (a breast rope adorned with shells or bells), made of broad cloth, or variegated canvas, or wax cloth. The five *qatars* of camels properly caparisoned were always kept ready for riding, together with two, for carrying a *Minajja*, which was a sort of wooden turret, very comfortable, with two poles, by which it could be suspended, at the time of traveling, between two camels. A camel's furniture was either coloured or plain. For every ten *qatars* they allowed three *qatars* coloured articles.[16]

It was a difficult task to maintain these camels properly, so the emperor appointed large number of servants to look after the camels. Firstly Akbar formed the camels into *qatars* and put each *qatar* under the charge of a *Sarban*, or driver. They were given sufficient wages for this service'. The servants of first class got 400 *dams*, the second class, 340 *dams*, the third class 280 *dams* and the fourth got, 220 *dams*, per mensem. These *qatars* were of three kinds – 1. Every five *qatars* of these three was in charge of experienced man, called '*Bistopanji*', or commander of twenty-five and he used to get a salary of 720 dams. He used to maintain a horse for his personal use and had four drivers under him. 2. It was just double the preceding, or ten *qatars*, which were

15. Ibid., p. 152.
16. Ibid., p. 152.

committed to the care of a *Panjahi*, or the commander of fifty. He was allowed to keep a horse and nine drivers. He got 960 *dams* for this service. 3. Here a *Panjsadi*, or commander of 500 was appointed and commanded every hundred *qatars.* While ten *qatars* were under his personal superintendence. With the exception of one *qatar*, the government had maintained drivers for the others. While the *Panjahis* used to work under his orders. The salary of *'Panjahis'* and *'Panjsadis'* was not equal. Abul Fazl writes that the *Yuzbashis* were also appointed to this post of *'Panjasadi'*. The Emperor, from his practical knowledge had appointed a grandee too. Each *'Panjsadi'* was placed under a 'grandee' of court. There were several foot soldiers, which had been selected to inquire from time to time into the condition of the camels, so that there may be no neglegence. Besides this, twice a year some people adorned with the jewel of sight used to inspect the camels, as to their leanness or fatness. This happened at the beginning of the rains and at the time of the annual muster. If any camel was disappeared or lost, the *'Panjahis'* and the *'Panjsadis'* had to bear fine in full value of the animal.[17]

If a camel was found lame or blind under their responsibility, they were fined with the fourth part of its price. There were *'Raibaris'* to teach the camels the way to cover longer distance. *'Raibari'* was the name given to a class of Hindus, who were acquainted with the habits of the camel. They used to teach the country bred lok camels, so to step as to pass over a great distance in a short time.[18]

Besides all these things, Abul Fazl has also mentioned the prices of these camels, which are following - a *bughdi* camel had the price of 5 to 12 *muhurs*, a *jaammaza* from 3 to 10 *muhurs*, a *bughur*, from 3 to 7 *muhurs*, a *'mongrel'* lok from 8 to 9 *muhurs,* a country-bred, or a *'Baluchi lok'* from 3 to 8 *muhurs*, and an '*arwana*' from 2 to 4 *muhurs*. Akbar had regulated the burdens to be carried by the camels. According to this management a fixed

17. Ibid., p. 155.
18. Ibid., p. 155.

weight had to carry by these camels. A first class *bughdi* could not carry more than 10 *mans*, a second class 8 *mans*, superior *jammazas*, *loks* etc. used to carry 8 *mans*, and a second class not more than 6 *mans*. Abul Fazl also mentioned that in this country (Hindustan) camels do not live above twenty four years.[19]

The emperor divided these cows and buffaloes in to different classes. He made special arrangements of food for them. Every head of the first *khasa* class got daily 6¼ *ser* of grain and 1½ d of grass for these animals. The whole stable got daily 1 *man* 19 s of molasses, which was distributed by the *Darogha*, who had been considered a man suitable for such a duty and office. The remaining cattle of *khasa* classes got daily 6 s. of grain, and grass as before, but no molasses were given while in other cow stables the daily allowance was as follows. First kind got 6 s of grain, 1½ d of grass at court, and sometimes only 1 d. The second kind got 5 s of grain, and grass as usual. The first class '*ginis*' got 3 s of grain, and 1 d of grass at court, otherwise only ¾ d second class do. 2½ s of grain, and ¾ d. of grass at court, otherwise only ½ d.

On the other hand 1 male buffalo (called *arna*) got 8 s of wheat flour boiled, 2 s of *ghee*, ½ s. of molasses, 1½ s. of grain and 2 d of grass. There is a very interesting thing about buffalo that at its young stage, it possesses great strength and fights astonishingly. At the time of fight it can tore a lion into pieces. When such strange thing was noticed by the emperor, he promoted this animal to the second stage and used it for carrying water. It then got 8 s of grain, and 2 d for grass. The female buffaloes were also used for carrying water. It got 6 s of grain, and 2 d for grass. The first class oxen for *cheetah* wagons got 6 ¼ s. of grain and other classes got 5 s. of grain but the grass was given in the same quantity. The oxen for heavy wagons got formerly 5 s. of grain and 1½ *dams* for grass. But for sometime they got a quarter serless, and grass as before.[20]

19. Ibid., p. 156.
20. Ibid., p. 158.

There was another factor for which the cow got an important place among the animals, the cow was useful for milk. Similarly buffaloes were also important for milk. So during Akbar's time milch-cows, and buffaloes, got a considerable quantity of food in proportion to the quantity of milk they gave. It is heard about the cows and buffaloes that a cow used to give daily from 1 to 5 s of milk, a buffalo from 2 to 30 s. The buffaloes of the Punjab were the best in this respect. As soon as the quantity of milk given by each cow has been ascertained, these were demanded for two *dams* weight of ghee for every *ser* of milk.[21] The emperor thought it better to appoint servants to look after the cows and buffaloes. There were different stables to keep these cattle. In the *khasa* stables one man was appointed to look after with four other heads of the cattle. These keepers used to get a fixed salary. The eighteen such keepers of the first stable got 5 dams per diem, and the remaining keepers got 4 dams. In other stables, the salary of the keepers was the same, but each had to look after six cows of the carriage drivers and some of them got their salaries on the list of the *Ahadis*. Some other servants got 360 d, otherwise 256 d. down to 112 d. *Bahalas*, or carriages were of two kinds – 1. *Chatridar* or covered carriages, having four or more poles (which support the '*chatr*' or umbrella), 2. The second was without a covering carriage suited for the horses was called '*ghur-bahal*'. For every ten wagons, 20 drivers and one carpenter were allowed. The head driver or *mirdhana*, and the carpenter, got 5 d. per diem, while the others got 4 *dams*. For some time 15 drivers had been appointed and no carpenter was allowed because the drivers themselves undertook the repairs and received on this account an annual allowance of 2,200 *dams* or (55 rupees).[22]

Apart from the salaries, emperor also made certain rules and regulations for the servents. Even he made provisions of fine or penality if any servent failed to perform his duty with sincerity. Similarly if any mishappening was reported about the cattle, the emperor charged him with fine. Even if a horn of

21 . Ibid., p. 159.
22 . Ibid., p. 160.

an ox was broken, or the animal got blind, the '*Darogha*' was fined one-fourth of the price, or even more, according to the extent of the injury. It shows that to what extent the emperor was careful and merciful for the maintenance of these cattle. The special provisions of timely inspection of the cattle were also there. The emperor appointed experts to check the health of the cattle. The cattle which were used for work or to carry load had been mustered once a year by the experienced men. These experienced men used to estimate the fatness or leanness of the cattle. But the cattle that were rarely used were also inspected every six months.[23]

Like other animals considerable quantity of food was given to the mules. Such mules which were not country bred got at court 6 *sers* of grain, 2 dams for grass, otherwise only 1½ *dams*. The country bred mules got 4 *sers* of grain, and 1⅝ of grass, when they were kept under maintenance otherwise 1 *dam* for grass. Each mule was allowed every week 3½ *jetals* for salt, but the salt was given in one lot.[24]

For the maintenance of the mules a number of articles were needed. The emperor took special measures to prepare these articles and equipments which are as follows. For imported mules, a head stall of leather was prepared with the cost of 20 ¼ *dams*. Similarly other things were also prepared for different costs. An iron chain weighing 2 s, and bearing the cost of 10 *dams*, a '*ranaki*' (crupper) of leather for 4 d., a *palan* (pack-saddle), 102 d., a *shaltang* (shawl strap), and a *palan* (pack-saddle), a *palas-tang* (blanket strap), 36 ¼ d., a *taqa tanab* (a rope for fastening the burden), 63 d., a *qatir shalaq* (a short whip) 6 d., a bell one for every *Qatar*, 10 d., a horse hair saddle, 40 d., a *kalawa* of leather bearing 13 d., a set of ropes, 9 d., a saddle cloth, 4½ d., a *sardoz* (a common head stall) 4 d., a *khurjin* (wallet), 15 d., a fodder bag, 4 d., a *magasan* (to drive away files) of leather, 1 d., a curry comb and a hair glove which was used for washing was of 4 *dams*. In this way all these articles which were used for the

23 . Ibid., p. 160.
24 . Ibid., p. 162.

maintenance had the total cost of 345 ¾ *dams.*[25] The furniture which was needed for the mules was renewed every third year, but for all iron and wood work, half of the price was deducted. The annual allowance for the repair of the furniture was 40 *dams.*, but on the march, the time of renewal depended on the wear. The mules were sold every six months at a cost of 8 *dams* per head.

For the maintenance of the mules servants were also appointed. The emperor divided the mules into *Qatars*. Each *Qatar* was under a keeper. The 'Turanis' Iranis, and Indians, were appointed to this office. The first two used to get a salary from 400 to 1,920 d., and the third class, from 240 to 250 d per mensem. Such keepers as had monthly salaries of 10 Rs. (400 d.) and upwards had to find the *peshang* (first mule of the *Qatar*) in grain and grass. Experienced people used to inspect the mules twice a year as to leanness or fatness. They were paraded before his majesty. These mules were kept with special care. If a mule got blinded or became lame because of any carelessness of the muleteer, he was fined one-fourth of the cost price, and one half of it.[26]

There were proper arrangements of food for the deer also. Deer were kept properly and their food was a follows, the '*khasa*' deer which was selected for fighting before his majesty, got 2 *sers* of grain, ½ *ser* boiled flour, 1/3 *ser* butter, and 1 *dam* for grass. Those which were kept on his majesty's hunting grounds, *kotals,* and fighting with other sets used to get 1¾ s. of grain while the flour and butter was given as before. The grass was supplied by each amateur himself. All *khasa* have bred, *kotal* deer, and those of his majesty's hunting ground, had each one keeper. The fighting deer of the sets had each one keeper for every two, while the single last one had a keeper for itself and nothing was given for grass. The deer which were given to people to have them flattened got 1¾ *ser* of grain and ½ *dam* for grass. There was one keeper for every four

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25 . Ibid., p. 162.
26 . Ibid., p. 163.

but arrangement were also done of one keeper for every two, only then if these deer were found fit for *khasa*.[27]

Some deer were also sent to other towns, they used to get 1½ *ser* of grain and each had one keeper. If there was newly caught deer then till seven days it could not get food regularly after that this newly caught deer used to get ½ *ser* of grain for a fortnight. After that they used to get 1 *ser*., and when one month was over then they got 1½ *ser* to eat.

A number of servants were employed for the care of the deer. In the deer park, *Mansabdars*, *Ahadis* and other soldiers were employed to look after the deer. They got considerable pay for this work. The pay of foot soldiers varied from 80 to 400 *dams*.

The emperor had maintained 12,000 deer for various purposes. They were divided into different classes and proper regulations were made for each of them. There was a systematic method to maintain the deer. There was also a stud for deer, in which new results were obtained. The food which was given to these deer was a follows: A large female used to get 1½ *ser*, grain and ½ *dam* for grass. A new born deer used to drink milk of the *dam* for two months, which was reckoned as equivalent to ¼ *ser*., of grain. Afterwards every second month, the allowance was increased by a quarter *ser* of grain, so that after a period of two years, it could get the same as its *dam* while ¼ *dam* was given for grass from the seventh to the tenth month. The young males also got weaned after two months, when they got 3/8 *ser* of grain, which was increased by that quantity every second month, so that, after two years, they could have 2 ¼ *sers*. On the other hand from the fifth to the eighth month, they got ½ *dam*., for grass, after which period they got ½ *dam* for grass.[28]

The dogs were very helpful for hunting purposes and also for tracing the hidden animal. One more things was that the dogs were capable to engage with

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27. Ibid., p. 230.
28. Ibid., p. 230.

dangerous animals for some moments, which could give enough time to the hunter to be alert and to attack the dangerous animal. Akbar used to like this animal very much for his excellent qualities. He imported dogs from all countries. The excellent dogs came from Kabul specially from the Hazara district (north of Rawal Pindi). At that time the servants had maintained these dogs very carefully. They even ornamented the dogs, and gave them names. Dogs were capable to attack a tiger. They were highly trained for the purpose of help and security. The *khasa* dogs got daily 2 *sers* of meet, similarly other got 1 ¼ *ser*. There was one keeper for a every two *'Tazi'* (hunting) dogs, their wages were 100 *dams*., per mensem. In this way dogs had been very helpful for hunting purpose.

The birds were also kept for various purposes. The keepers to look after these birds were employed in this department. Many *mansabdars, Ahadis*, and other soldiers were employed. The footmen were mostly *Kashmiris* or *Hindustanis*. Their pay was as follows. The first class of the former, first grade got 7½ R., second 7 R., third 6 ¾ R., second class, first grade got 5½ R., second, 5 R., third 4½ R. Te first class of the latter (*Hindustanis*), first grade, 5 R., second 4¾ R., third 4½ R., second class, first grade 4½ R., second, 4 R., third 3 ¾ R., the third class, first grade, 3½ R., second 3½ R., and the third got 3 R.

A considerable amount was given for the expense of food of these birds. In Kashmir and in the *aviary* of Indian amateurs, the birds were generally feded a day, but at the court they were feded twice. A *baz* (falcon) got a quantity of meat weighing 7 *dams*, the *jurra* got 6 *dams., bahri, lachin*, and *khela*, 5 *dams*., the *basna*, 3 *dams*., the *chappak basna, shikara, chappak shikara, basra* and that etc. got 2 *dams*. Towards the close of every day the sparrows were feded on, of which the *baz, furra*, and *bahri*, got each seven, while the laching got five, the *basna*, three and others got only two. The *charghs* and *lagars* got meat and at the same time the *Shungars, Shahbazes* and *burkats* got one ser. These

birds were fed even on the hunting ground for which they were taken there.[29]

Akbar always rewarded the hunters and the keepers for their performance. He used to reward the *Mir Shikars* (superintendents of the chase) according to their ranks, with suitable presents. The donations were also fixed for each game brought in, varying from 1 m. to 1 d. If the falcon bring down the game alive or dead, attention was paid to the kill which it exhibited and to the size of the quarry. The man who kept the falcon got one-half of the allowance. Abul Fazl writes "His Majesty hunts himself; fifty percent of the donation is stopped. If birds are received by the imperial aviary as *Peshkash* (tribute), the *Qushbegi* (superintendent of aviary) gets for every *baz* 1½ R., and the accountant ½ R. For *jurra*, the *Qushbegi* gets 1 R., the accountant, ¼ R., the *bashas*, the former receives ¼ R., the latter, 1/8 R., the latter *chargh, charghela, khela, bahri-bachcha*, the former gets 1/8 R., the latter 1/10 R., for every *Chhappak, basha, dhoti* etc., the former receives 1/10, the other 1/20 R (*suki*)".[30]

29 . Ibid., p. 305.
30 . Ibid., p. 306.

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Illustrations



Plate 14 A Story of Loyal Mongoose

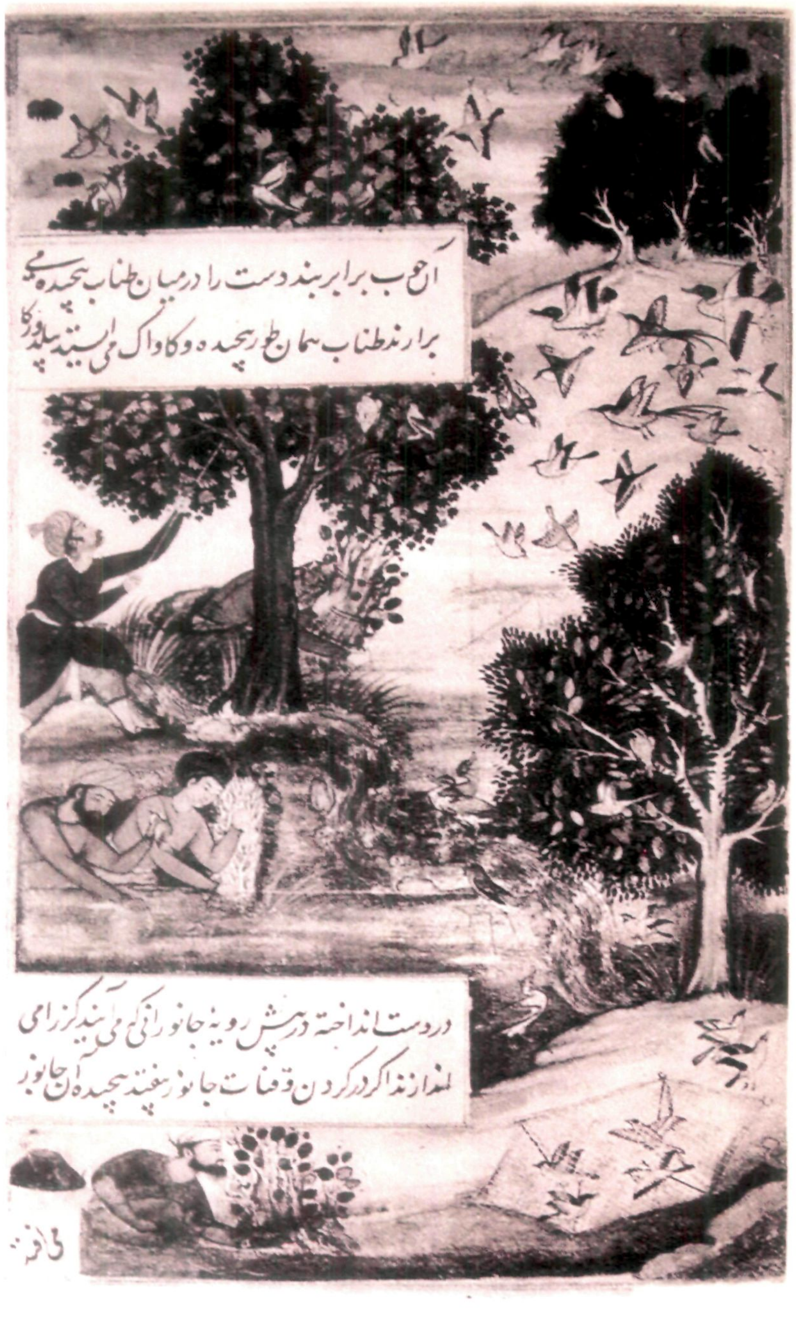


Plate 15 Bird Trapping

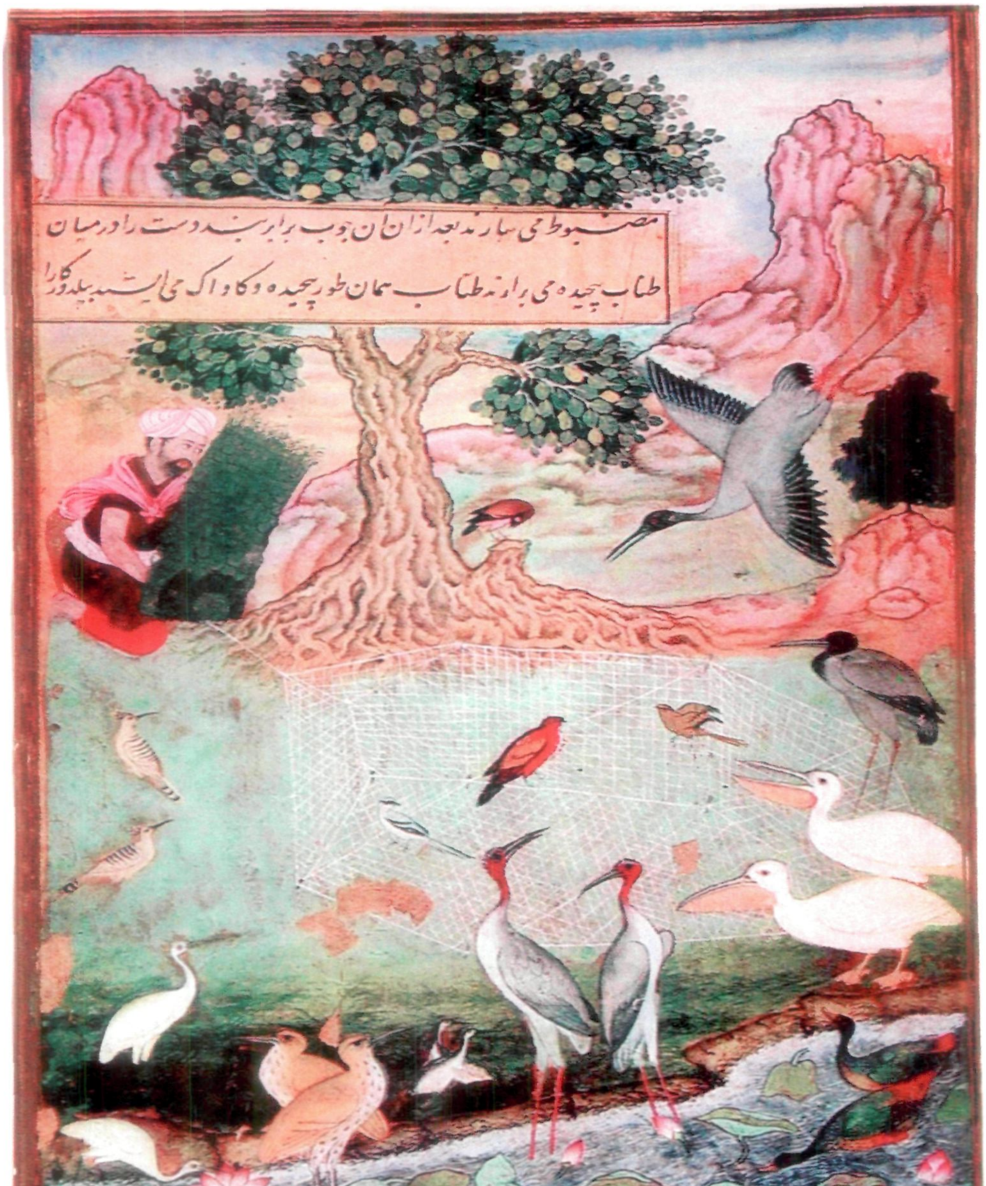


Plate 16 Bird Catching at Baran



Plate 17 Bird Catching in the Vicinity of Kabul



Plate 18 Trapping of Wild Elephant



Plate 8 Prince Daniyal is shown as surveying a pair of *Nilgai* shot by him



Plate 9 Aurangzeb Hunts *Nilgai*



Plate 10 Aurangzeb seated on an Elephant and Hunting Lion and Lioness



Plate 11 Lion Condemns *Dimna*



Plate 12 A Crow sitting on a tree seems to address a Huge Assembly of Different Birds



Plate 13 Crows Watches the Fire Burn in Front of the Owl's cave



Plate 1 Babur Hunting Kiangs (Wild Ass)

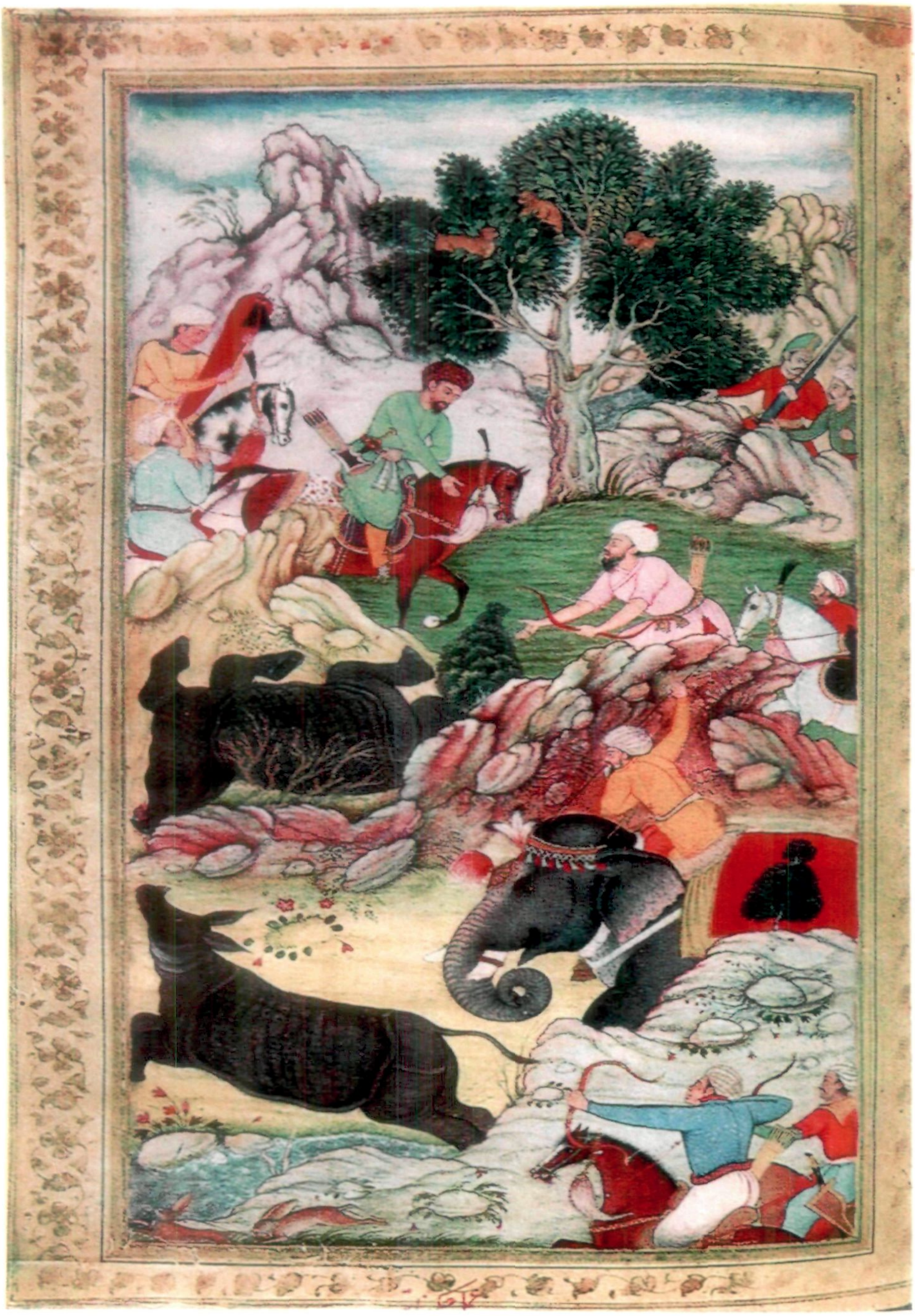


Plate 2 Babur Hunting Rhinoceros



Plate 3 Babur Hunting Deer in Ali-Shang and Alangar Mountain



Plate 4 Akbar Hunts with Trained Cheetahs



Plate 5 (a) Akbar Stages a *Shikar* near Lahore



Plate 5 (b) Akbar Stages a *Shikar* near Lahore



Plate 6 Akbar Hunts Wild Asses in the Desert



Plate 7 Jahangir's Huntsman is Attacked by a Lion



Plate 19 Catching of Cheetah by Prince Salim near Allahabad

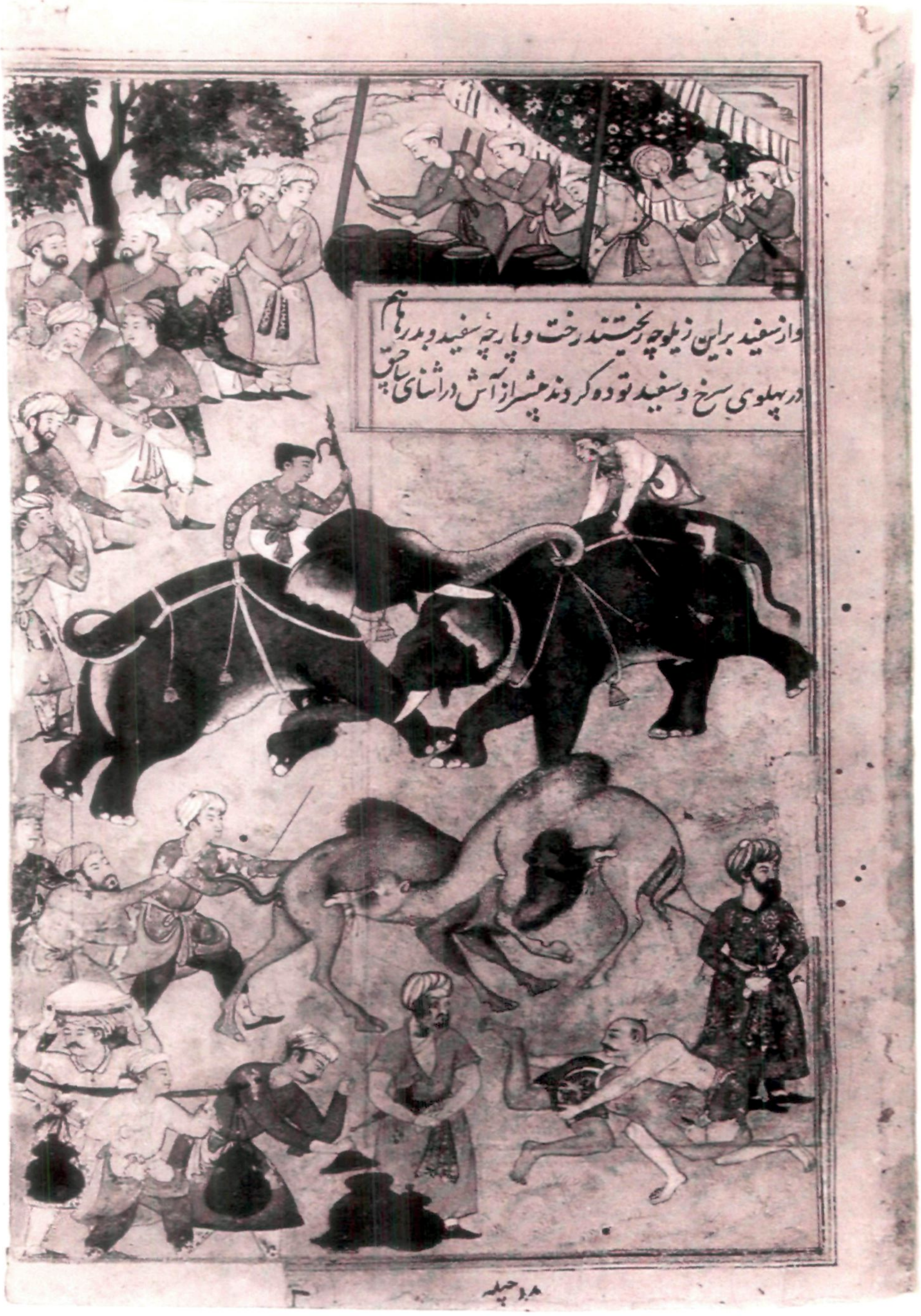


Plate 20 Fight between an Elephant and a Rhinoceros



Plate 21 Fight between an Elephant and a Rhinoceros



Plate 22 Fight Scene between *Ram* and Deer

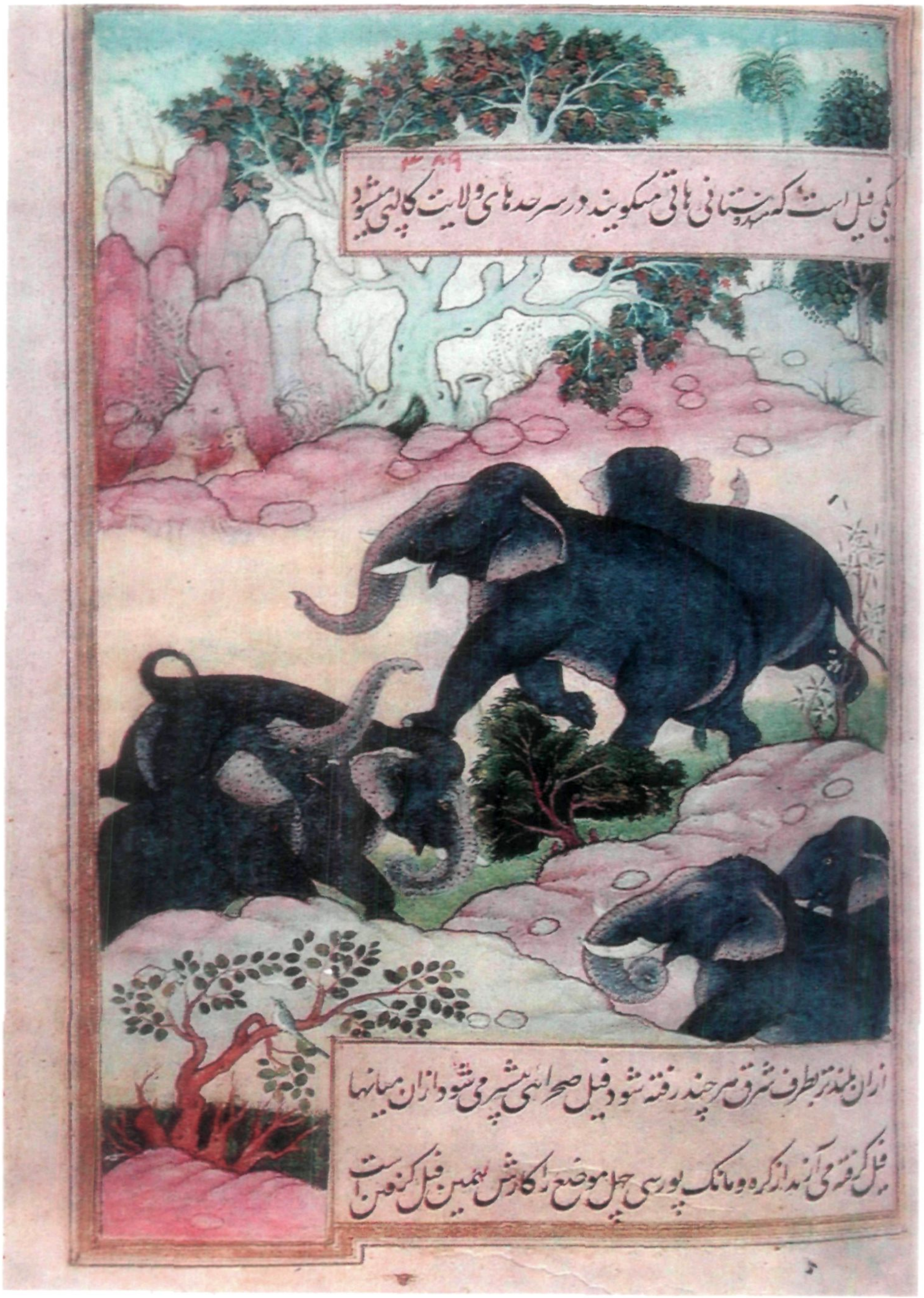


Plate 23 A Portrait of Elephants

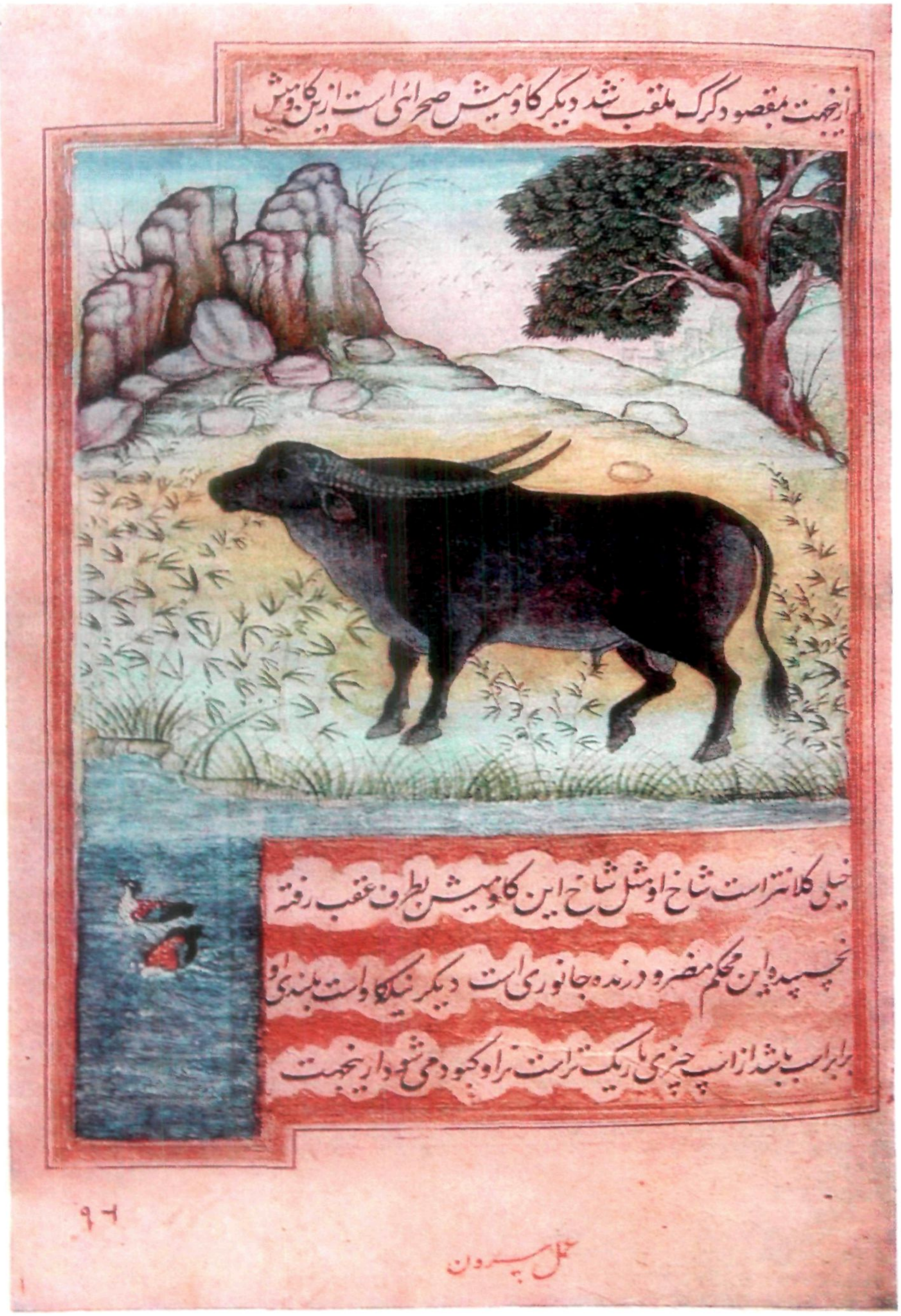


Plate 24 The Portrait of a Wild Indian Buffalo



Plate 25 Portrait of Kalahar and Zebu Chini



Plate 27 Saras Crane with Neck Arched

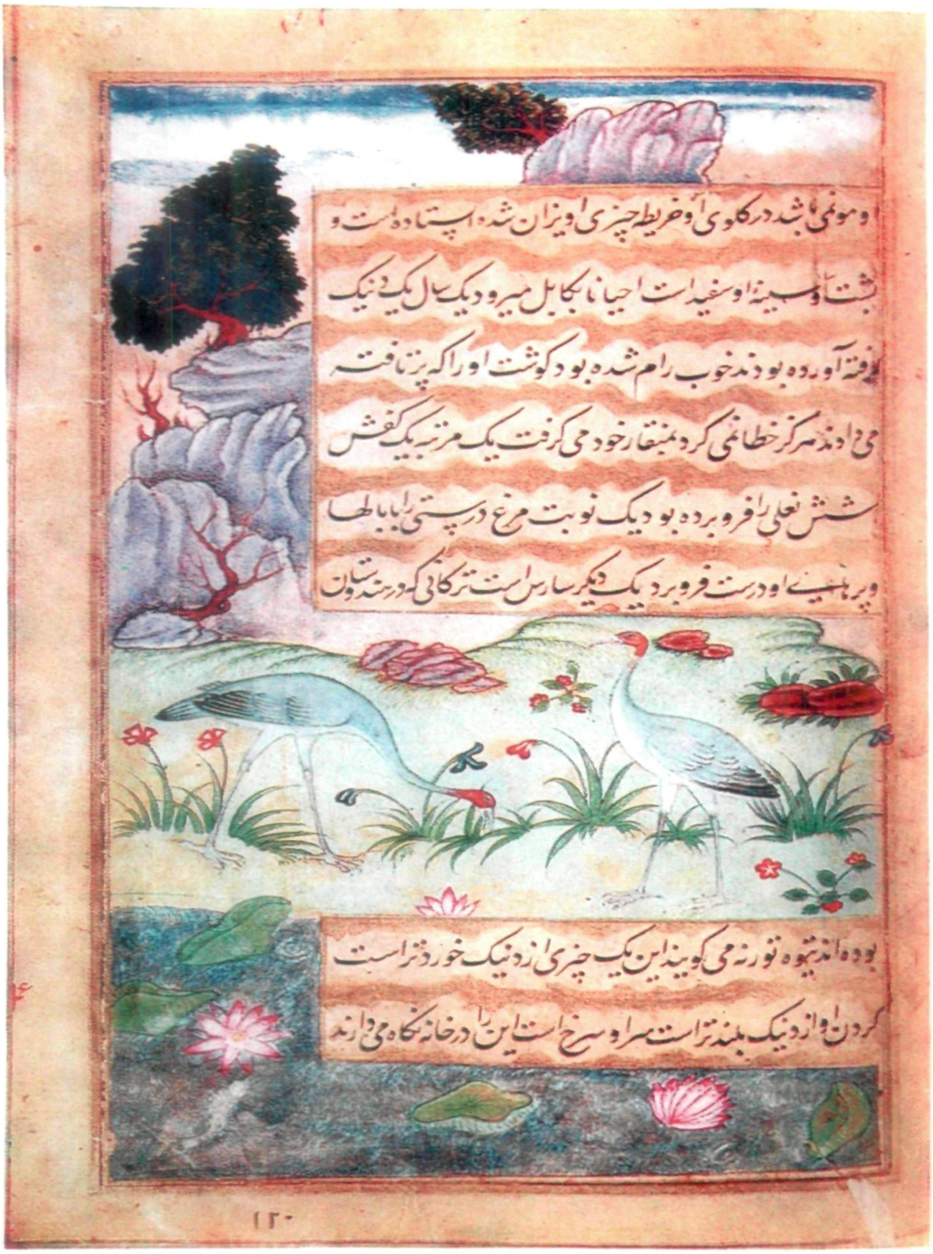


Plate 28 A Pair of Manik Standing near the Lotus-covered Pond

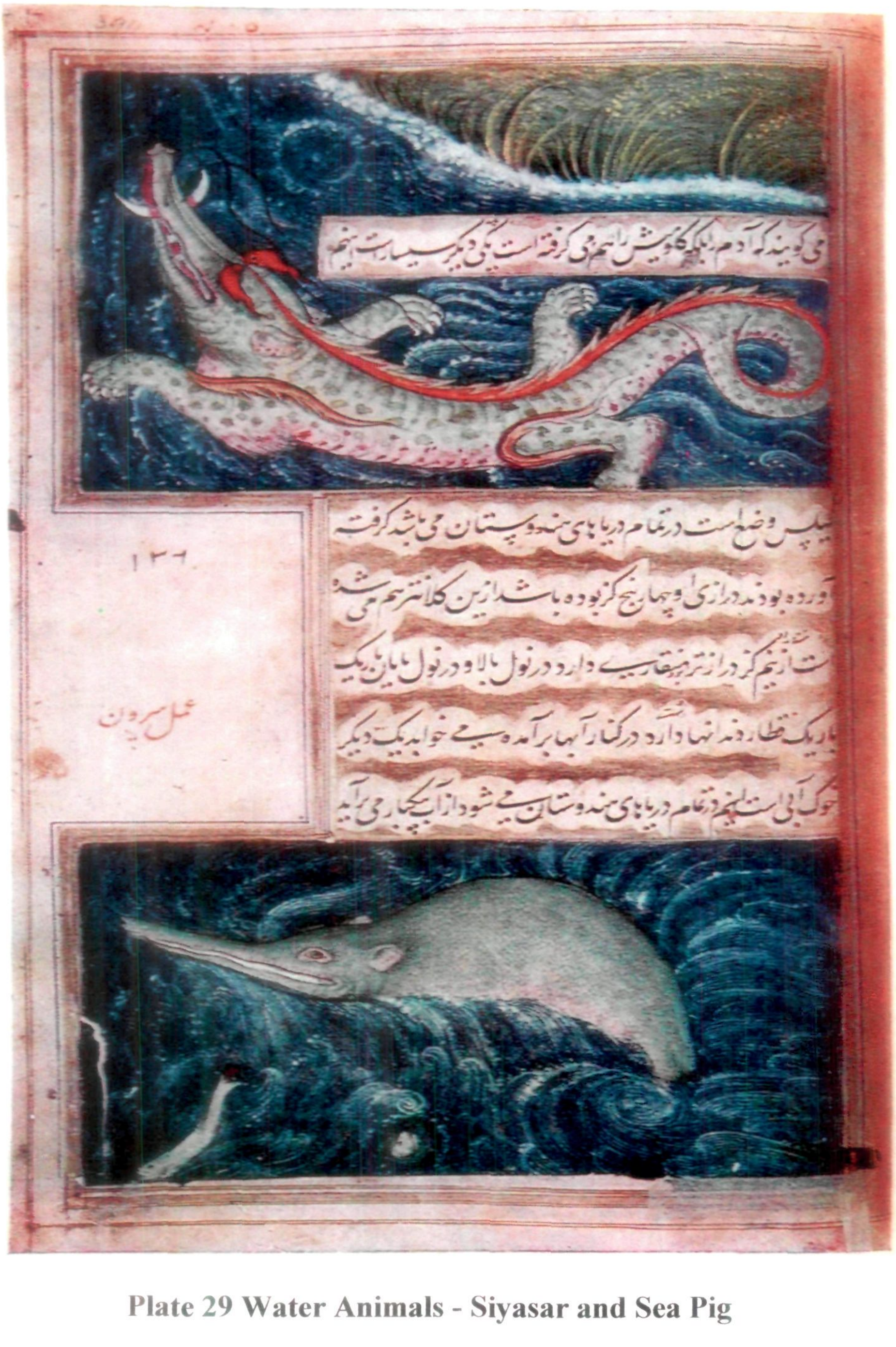


Plate 29 Water Animals - Siyasar and Sea Pig



از دو طرف دام انداخته آمدند سر طرف دام از آب یک گز
پیشتر بلند بود بسیاری از ان ماهیها از دام یک گز بلند بر جسته
گذشتند دیگر در بعضی آبهای هندوستان ماهیهای خورد هست
اگر آواز درشتی یا شرقه پای شود یکبار از آب یک گز
یک و نیم گز بلند جسته می برآیند دیگر غوکهای هندوستان
اگرچه همان طور غوکها می شود اما این غوکها در روی آب هفت هشت گز
می دوند نباتاتی که مخصوص هندوستان است یکی
انبه است اکثر مردم هندوستان بی را حرکت
تلفظ می کنند چون بد مستلفظ میشود بعضی نغزک گفته اند

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Plate 30 Depicting Six Frogs from Baburnama

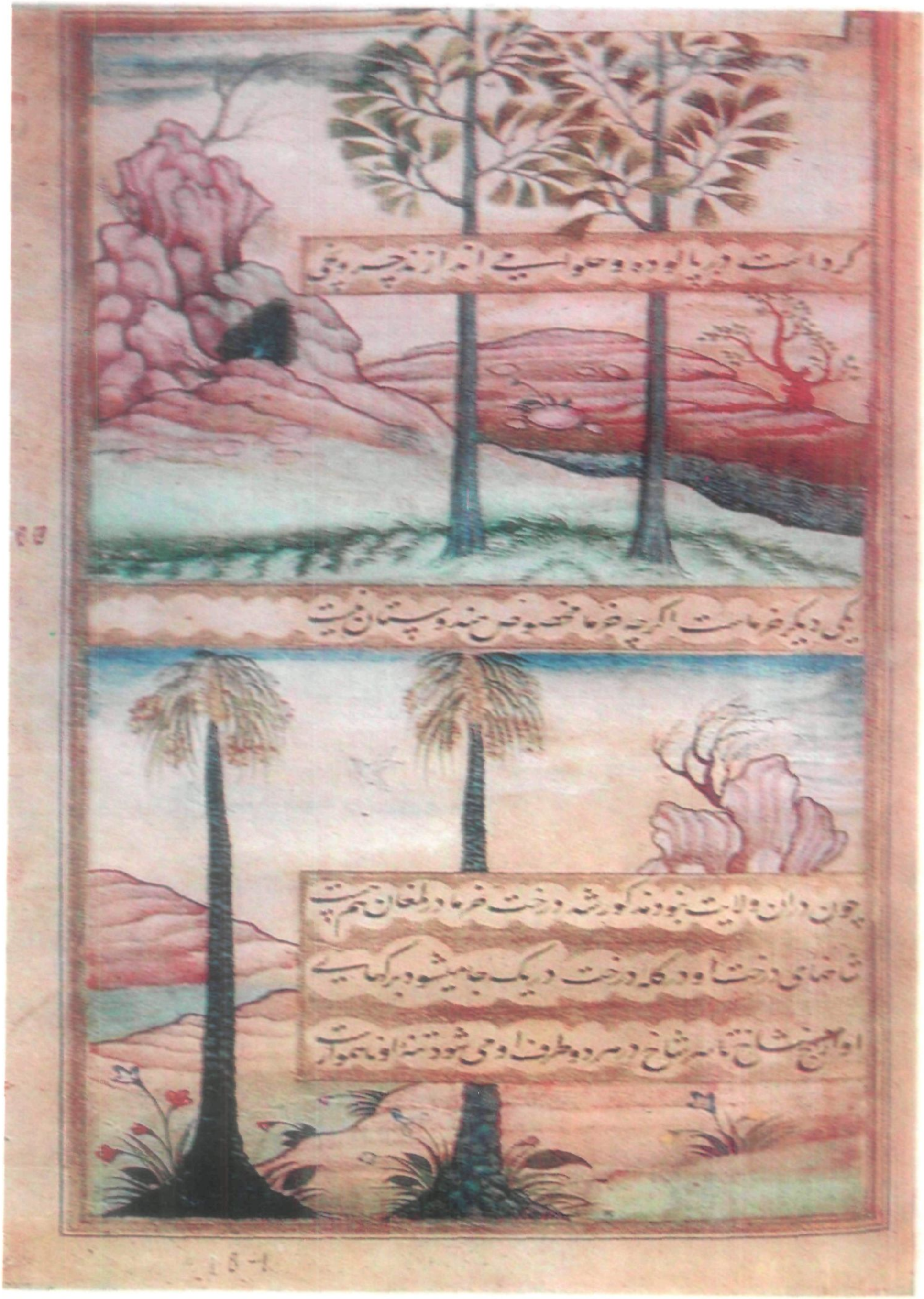


Plate 31 The Trees of Chirunji and Date

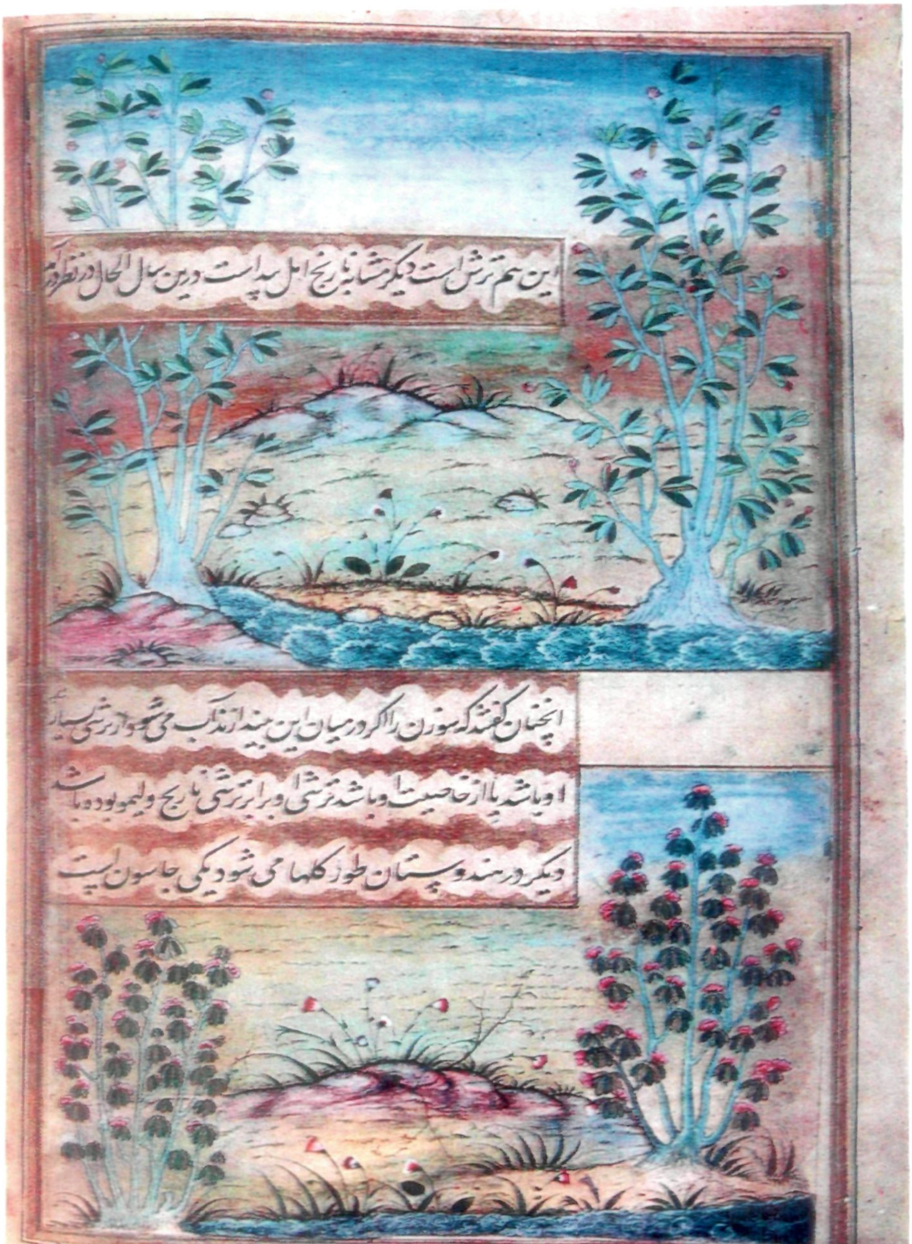


Plate 32 A Flower Plant *Jasun*



Plate 33 A falcon on its Perch



Plate 34 A Black Buck



Plate 35 Spotted Forktail



Plate 36 The Nilgai



Plate 37 The Turkey Cock



Plate 38 Himalayan Cheer Pheasant



Plate 39 Zebra

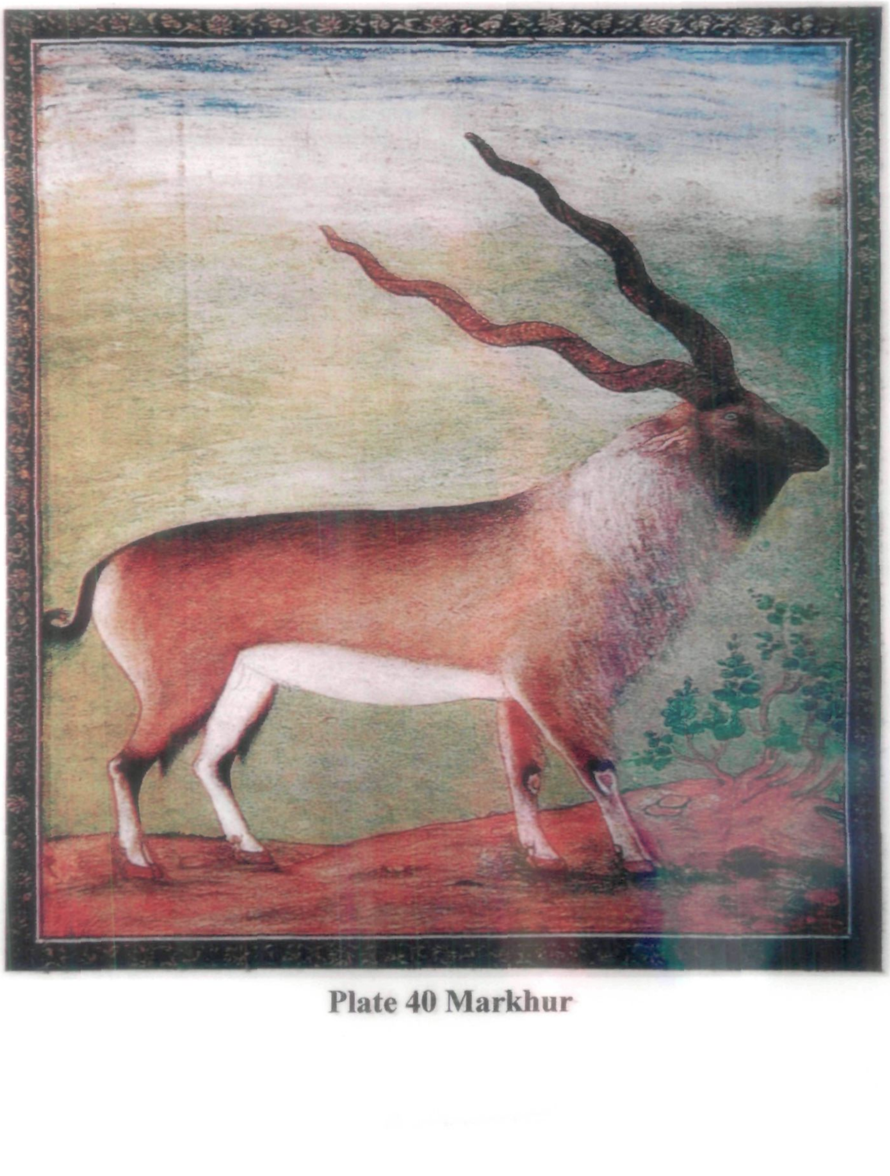


Plate 40 Markhur



Plate 41 Great Hornbill



Plate 42 Tulip (Tulipa Clusiana) and a Butterfly



Plate 44 Margin is painted in a Colligraphic Sketch of Persian Poetry



Plate 43 A Crane in Standing Position



Plate 45 Dado Depicting Flora, *Kutubkhana*

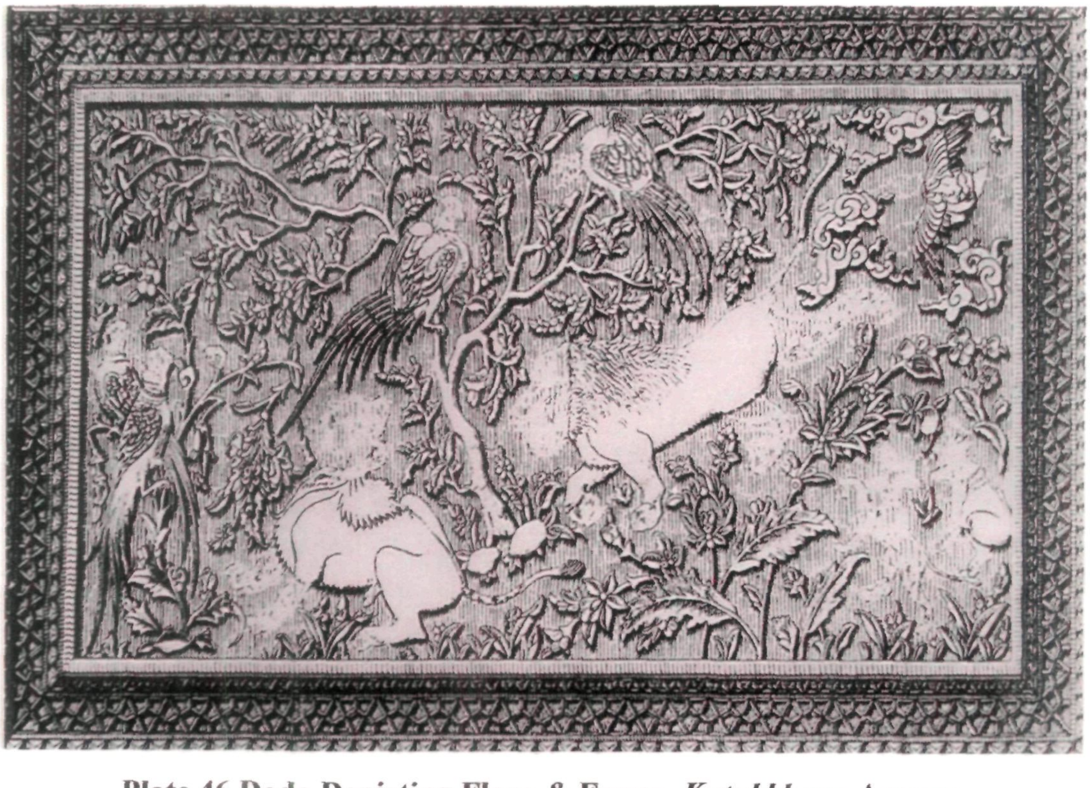


Plate 46 Dado Depicting Flora & Fauna, *Kutubkhana* Annexe

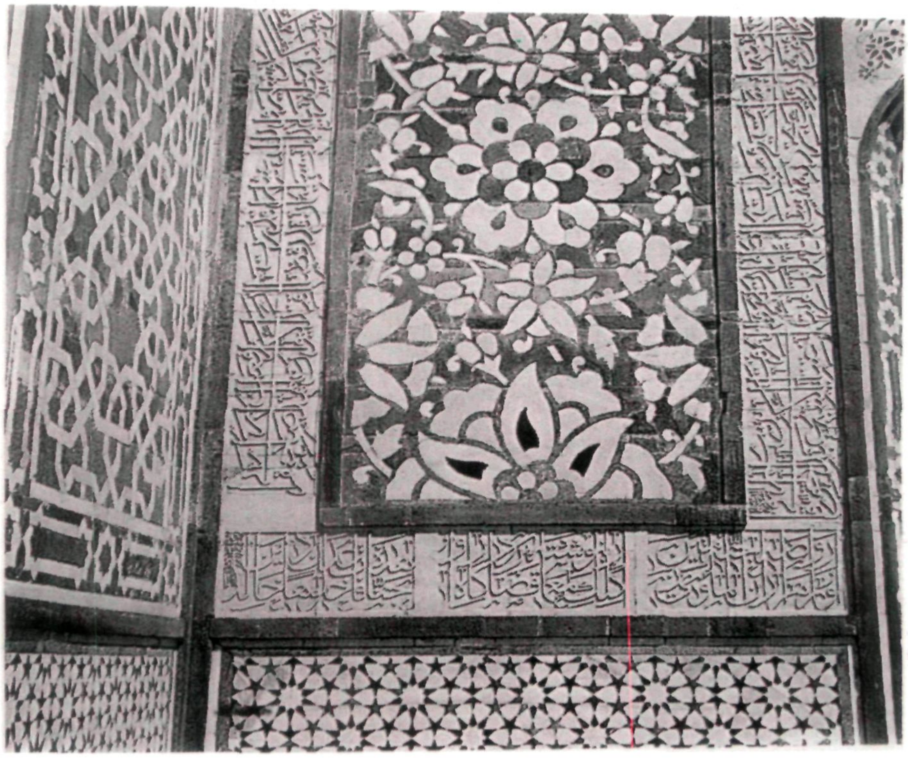


Plate 47 North Iwan of Main Gateway

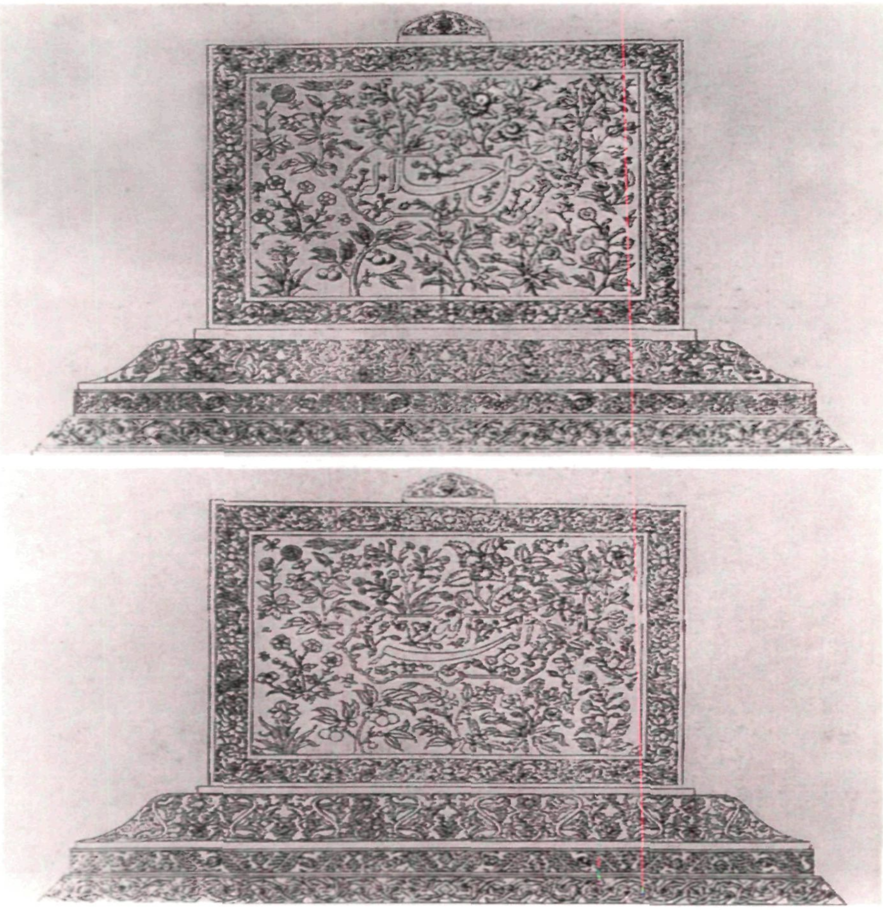


Plate 48 Upper Most Cenotaph



Plate 49 Dado Musamman Burz

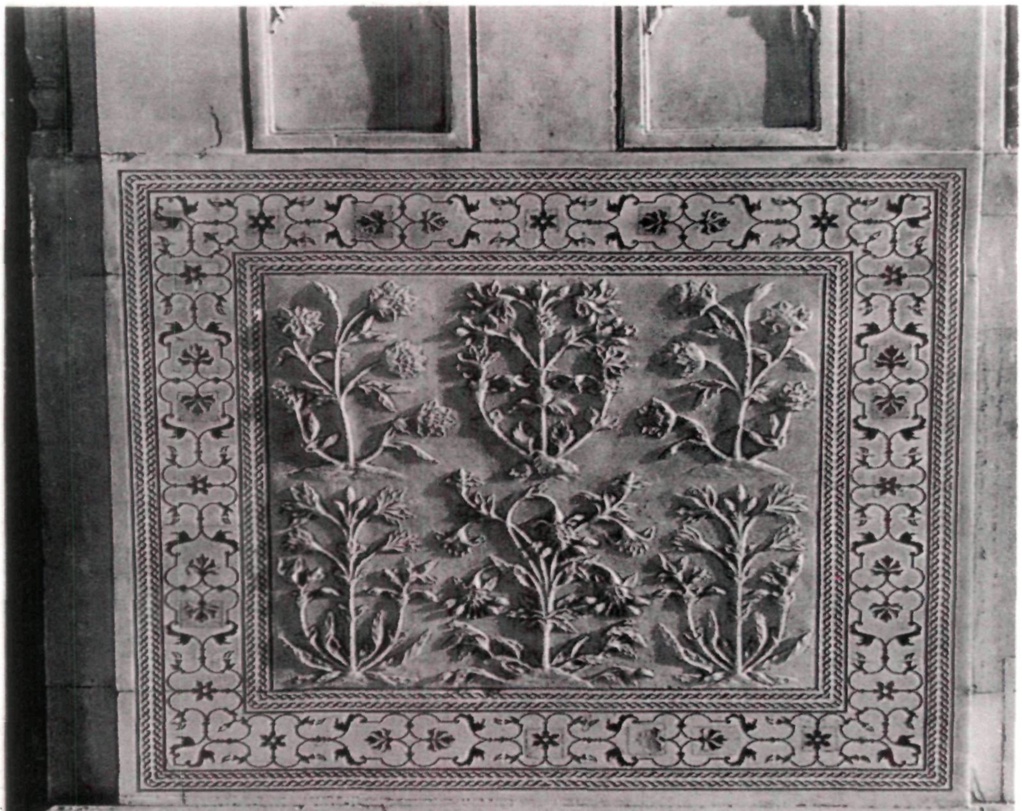


Plate 50 Dado Diwan-i-Khas

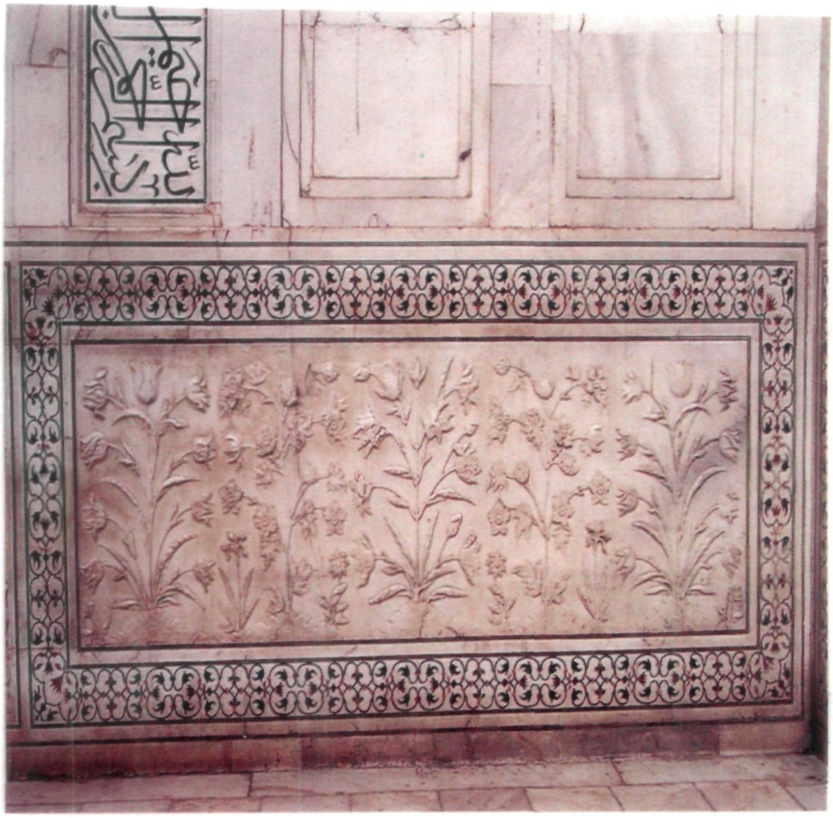


Plate 51 Portal Dado, Taj *Mahal,* Agra

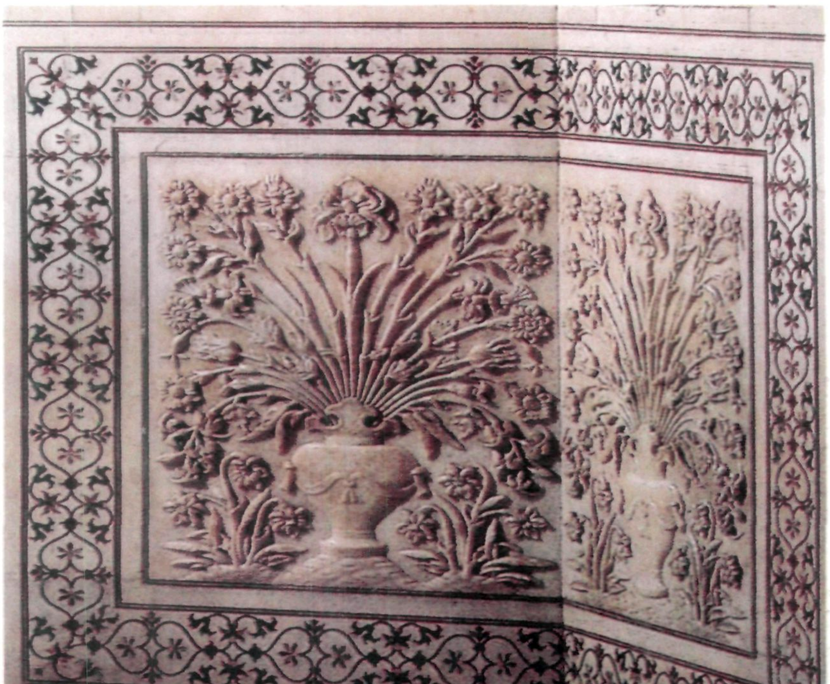


Plate 52 GhataPallava



Plate 53 Bagh-i-Wafa, (Garden of Fidelity)



Plate 54 Bagh-i-Wafa (Garden of Fidelity)